# An Empirical Investigation Of The Relationship Between Perceived Quality, Value, Satisfaction And Behavioural Intentions Among Visitors To UK Attractions

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## Abstract

Evidence abounds that visitor attractions are the central element of tourism development. Academics and practitioners have therefore focused much attention on attraction service quality, customer satisfaction and subsequent behavioural intentions. However, there is a dearth of empirical investigations supporting most claims relating to quality and satisfaction in an attractions context. Furthermore, perceived value, which theoretically influences behavioural intentions regarding attractions, has been omitted from models investigating attraction service constructs. Thus, there is a need for empirical investigation of the relationship between the perceived quality of attractions, visitor satisfaction and other service constructs, particularly perceived value. This study explores these service quality issues within the UK visitor attractions industry with particular reference to Alton Towers and Blists Hill Victorian Town. The aim of the research was to gain an understanding of how attraction visitors evaluate quality and to explain the relationship between service quality, value, satisfaction and behavioural intentions. To this end, a sequential, exploratory mixed-methods approach was employed. This included unstructured interviews, content analysis of promotional materials, expert opinion and a questionnaire survey of visitors at the two attractions. The sample for the latter was drawn from individuals who had visited the two attractions within the last 12 months.

To identify key quality dimensions in the attractions, principal components analysis (PCA) was employed; the results revealed six underlying factors: 'activities', 'staff', 'operation and environment', 'retail', 'access' and 'ease of use'. Ordinary least squares (OLS) multiple regression analysis was used to examine the relationship between the constructs. The factors that most influence quality are 'activities' and 'retail', and value is primarily determined by 'activities', 'staff' attributes and 'retail'. Satisfaction is most influenced by perceived value whereas visitor satisfaction explains most of the variance in behavioural intention. The findings also show that satisfaction partially mediates the relationship between value and behavioural intentions, and that between quality and behavioural intentions. Value was shown to partially mediate the relationship between attraction attributes and satisfaction and between quality and behavioural intentions.

The research makes several significant theoretical and managerial contributions. The key finding is that attraction attributes exert more influence on perceived value than on perceived quality. This suggests that the conceptualisation and measurement of value in previous research were possibly inadequate in capturing the dimensions of this construct. The findings also confirm the cognitive-affective-conative order between the service constructs within the context of UK visitor attractions and the important role of perceived value in understanding quality, satisfaction and behavioural intentions. However, the relationship between these constructs cannot be generalised and further research is needed to examine the relevance of the findings to other sectors. The results also indicate that attraction managers need to review their promotional materials, particularly websites, and ensure that the most effective messages are communicated to both existing and potential visitors.

# Chapter One

# Introduction

## 1.1 The tourism industry

The tourism industry has been documented to be one of the largest businesses in the world economy and it continues to be a formidable industry for most countries, generating employment and income, and serving as an agent of social change. The demand for tourism is quite diverse both in nature and magnitude. Despite the prevailing global economic uncertainty, demand for tourism continues to exhibit resilience in many regions of the world (UNWTO, 2011; WTTC, 2012). According to UNWTO (2011) tourist arrivals worldwide grew year on year from mere 25 million in 1950 to 806 million in 20005 (UNWTO, no date). In 2008, international arrivals reached 924 million and was estimated to have declined to 880 million in 2009 due to the economic recession that started in late 2008 (UNWTO, 2010). Growth returned to international tourism in the last three months of the year 2009 and tourist arrival reached 982 million in 2011, with about 85% of countries recording positive growth. Global travel and tourism direct employment also experienced growth rising by 1.2 million in the year 2011 (WTTC, 2012).

The scope of tourism as a phenomenon is as enormous as its demand. The tourism industry comprises of different types of organisations and stakeholder groups and the organisations and groups of people involved include more than those that primarily offer tourist products and services. The tourist product in essence is an amalgam of components that span a range of sectors such as

accommodation, food and beverage, entertainment and including attractions, the focus of this thesis. In turn, a destination is a collection of tourist products under a brand name, offering an integrated experience to visitors (Buhalis, 2000; Murphy *et al*., 2000). A destination is a geographic area which can be defined at various levels of aggregation e.g. village, town, region or country. Cooper *et al* (2008) grouped destination attributes into four categories – attractions, access, amenities and ancillary services.

Jansen-Verbeke (1986) postulates a conceptual model of tourism in the city (the model is also applicable to other settings) as consisting of three principal categories of elements namely: primary, secondary and conditional elements. The primary elements are further divided into two categories: activity place, representing major attractions in the city and leisure setting, denoting the physical and socio-cultural context in which the visitor attractions are located. The secondary elements include facilities for catering and shopping. The third category depicted as conditional elements relate to accessibility, parking facilities and touristic infrastructure.

The development of tourism and subsequent activities of visitors typically rely on a destination's natural, cultural and economic resources. McKercher *et al* (2004) submit that numerous cultural heritage resources inherently are fit to become visitor attractions. Moreover, even where a destination's natural and cultural assets are not primarily meant for tourism, they are converted to attraction products and where necessary are modified for easy consumption

(Huges, 1998). Despite this, the attractions sector has received considerably less attention in tourism research than destinations such as countries or cities.

### 1.2 An overview of the attractions sector

Attractions are the pivotal element of tourism development; evidence shows that tourists are more likely to be motivated to visit destinations that have such resources that can satisfy their needs (Richards, 2002). Tourists' needs for attractions may stem from various forms of motivations ranging from pleasure seeking – recreation and relaxation to education – knowing other people's culture and visiting museums. Other people are motivated by religious belief and business. Given this, visitor attractions form the most crucial component of tourism product (Inskeep, 1991; Swarbrooke, 2001; Richards, 2002; Wanhill, 2003 and Leask, 2003). At the very basic level, they provide the focus for tourists thereby drawing visitors to a destination; on the other hand, they serve as agents of change, social enablers and major income generators (Leask, 2003).

Over the years, there has been a tremendous growth of tourist attractions; in some countries, supply has more than doubled (Inskeep, 1991 and Stevens, 2003). For instance in Wales it was estimated that about 300 new attractions entered into the market within a decade (1989 – 2000) doubling the attractions supply (Stevens, 2003). In recent times, English visitor attraction trends in terms of admission pricing policy, revenue and expenditure have been wide-ranging and these differ from sector to sector (VisitBritain, 2008; VisitEngland, 2012). Whilst some of the sectors (e.g. museums and art galleries, heritage

centres, farms and gardens) have experienced consistent growth and have outperformed the market, others (e.g. theme parks, wildlife attractions and zoos, steam and heritage railway and historic properties) have fluctuated and performed below the general market trends (VisitEngland, 2012).

In 2011 the general outlook of the attractions industry in England looked positive as the industry reported a 3% annual increase in total visits. However, some environmental factors such as weather, which was mostly favourable in the spring and autumn, and the enduring economic recession, which prevented people from taking vacations abroad, may have played a significant role in the increase recorded. Also in the year 2011, gross revenue for English visitor attractions industry saw an increase of 5%, which may be a consequence of the resultant increase in adult (5%) and child (7%) entry charges in addition to the 5% decrease in marketing spend.

### 1.3 An overview of perceived service quality

The commonly cited definition for service quality is the one put forward by Parasuraman, Zeithaml and Berry (1994) denoting service quality as the gap between the customer's expectation and the service received. Based on this, perceived quality is the extent to which tourist expectation and delivered service are similar or different; given this view, expectation becomes a major influence on the way the characteristics of service will be perceived and consequently influences the resultant level of satisfaction derived from the delivered service.

Service quality is the result of a complex network of several dimensions (Wuest, 2001). A number of writers have put forward theories regarding the dimensions of quality (e.g. Garvin, 1984; Gronroos, 1984; Parasuraman, *et.al*, 1985 & 1990 and Otto and Ritchie, 1995). Whilst the Parasuraman, *et al*'s, (1990) five dimensions of service quality, upon which their SERVQUAL model is based, have been widely embraced, there have been controversies regarding the validity of the dimensions and query concerning expectation being a reliable benchmark for measuring quality (see Cronin and Taylor, 1992; Crompton and Love, 1995; Oh, 1999).

One area of study where considerable effort has been expended is the field of service quality measurement. Following Parasuraman *et al*'s (1988) model - SERVQUAL, subsequent models have been modified to measure service quality in various sectors of the tourism industry. These derivatives include SEVPERF (Taylor and Cronin, 1992) – fast-food industry and other services; LODGSERV (Knutson *et al*., 1990) – hotels and various travel and tourism sites; HISTOQUAL (Frochot and Hughes, 2000) – heritage sites and leisure facilities; DINESERV (Stevens *et al*., 1995) – restaurants and HOLSAT (Tribe and Snaith, 1998) – fast-food industry and resort. Whilst the SERVQUAL model and most of its derivatives assume that expectations play a major role in service quality evaluation, SERVPERF measures only customers' post-consumption perception of service received; others made use of Importance-Performance measures i.e. performance of attributes weighted by their perceived importance from the customer perspective.

In order to understand the role of quality in service evaluation, many studies have examined the context of service quality and its relationship with variables like price (Magion, 2005), customer satisfaction and behavioural intentions (Parasuraman *et al.*, 1988; Taylor and Cronin, 1992; Weiermair, 2000; Soutar, 2001; Mohsin, 2005; Olorunniwo and Hsu, 2006), productivity (Gummeson, 1998) and competitiveness (Harrington and Akehurst, 1996; Baddeley, 2004; Gacira and Garcia, 2005).

### 1.4 Perceived quality and the tourism industry

The subject of quality in tourism has been extensively explored and two broad reasons can be attributed to this. The first is to provide and update understanding of the concept of quality and shed light on how it relates to tourism, considering the nature of the tourism product. Research has shown that quality in the service industry, within which tourism operates, is a distinctive area of study in contrast to quality management in manufacturing. The second reason is due to the central role quality plays in the survival of organisations. When closely examined the two are not mutually exclusive though it may be argued that the latter gives rise to the former.

By its nature, the tourist product consists of tangible and intangible elements hence quality in tourism is created by the process of service delivery (the intangible aspect e.g. staff competence) and outcomes of service (the tangible element e.g. duration of activity). The implication here is that service quality in this context is assessed from the relational quality perspective in addition to the evaluation of the tangible, physically quantifiable characteristics of an

offering. The service delivery aspect being predominantly intangible is more difficult to measure in contrast to the tangible attributes of the tourism product, hence there is a need for accurate conceptualisation in order to understand and manage it effectively.

As a result of growth in the attraction industry, attraction service providers will have to compete on the basis of their target markets and the quality of their products/services taking into account the fact that attraction visitors are becoming more discerning and demanding (Swarbrooke, 2001). Evidence abounds that quality has a significant role to play in the success or failure of tourism organisations including those providing visitor attraction services (Soutar, 2001; Ribeiro, 2003; Simpson, Bretherton and de Vere, 2004; Jones and Haven-Tang, 2005).

### 1.5 The relationship between service quality, perceived value, customer satisfaction and behavioural intentions

Very few empirical studies in services management have explored the relationship between service quality, perceived value, customer satisfaction and behavioural intentions particularly with regard to perceived value (Cronin *et al.*, 2000; Gonzalez *et al.*, 2007) despite the fact that it is a relationship that has been tagged germane in service delivery (Brady *et al.*, 2001).

The relationship between these four services management constructs is contentious. Chief amongst the contentions is the conceptualisation of service quality and satisfaction as the discrepancy between expectations and

performance. The fundamental processing mechanisms for evaluating service quality and satisfaction are dissimilar (Gonzalez *et al.,* 2007; Zabkar *et al.,* 2010). On one hand quality evaluation (and perception of value) is largely a cognitive process; on the other satisfaction is an affective outcome from the service experience (Lee *et al.,* 2007) and behavioural intentions as the outcome construct has been classed by Zabkar *et al* (2010) as conative component of visitor behaviour. The commonly obtained theoretical order in services management research is the cognitive-affect-conative sequence (see for instance Brady *et al.,* 2002; Brady et al., 2005; Zabkar *et al.,* 2010). However, it must also be noted that models exist that specify an affect-cognitive-conative order i.e. a satisfaction-quality sequence (e.g. Bolton and Drew, 1991) and a satisfaction-value-behavioural intentions sequence (Duman and Mattila, 2005).

### 1.6 Rationale for the study

The number of studies that have been carried out on the subject of quality and satisfaction in tourism is indicative of the importance associated to the subject. Researchers have explored the context of service quality and relationships between service quality and variables like price, productivity, customer satisfaction and profitability and behavioural intention (Bolton and Drew, 1994; Cole et al., 2002; Spinks *et al.,* 2005; Lee *et al.,* 2007; Caro and Garcia, 2007; Nowacki, 2009; Zabkar *et al.,* 2010). While much work has been done in other sectors and aspects of tourism, empirical evidence of the relationship between these variables in the visitor attraction sector is limited.

Richards (2002) also notes that despite the fact that attractions are a vital sub-element of the tourism system, studies in this area lack theoretical depth and empirical foundation. For example, it is widely presumed that satisfaction is a leading factor responsible for repeat visitation and possible positive word of mouth advertisement of visitor attractions (e.g. Prentice, 1993; Swarbrooke, 2002); however, there are few empirical studies to support this hypothesis explicitly (Nowacki, 2009). Perceived quality is viewed in a like manner, particularly amongst practitioners in the attractions sector.

Gallarza and Saura (2006) noted that service quality and satisfaction have been dominating variables in the early studies of tourism marketing. Consideration of the interaction of other variables, in addition to service quality and customer satisfaction, particularly perceived value, has been suggested (Oh, 1999; Gonzalez *et al.*, 2007; Zabkar *et al.*, 2010). A partial exploration of service constructs (e.g. only satisfaction and/or service quality) and behavioural intentions will possibly offer inconclusive and confusing representation of the relationship that exists between the variables (Cronin *et al.*, 2000). It has been argued that behaviour is better understood when analysed through perceived value and evaluation of only satisfaction and/or service quality in determining behavioural intentions may be clearly incomplete (Gallarza and Saura, 2006). In spite of this understanding, models of the relationship between service constructs and behavioural intentions are often proposed without the inclusion of perceived value (see for instance Zabak *et al.*, 2010). McDougall and Levesque (2000) submit that perceived value has a significant influence on

customer satisfaction hence its inclusion will bring about a more comprehensive model of service constructs and behavioural intentions.

In addition to this, consideration of attraction visitor socio-demographic characteristics is essential. Whilst socio-demographic factors are employed in market segmentation and developing marketing strategy, little research has hitherto been done to develop our understanding of the differences in attraction visitor perceptions of the service constructs e.g. satisfaction on the basis of visitor characteristics (Spinks *et al.,* 2005).

From the foregoing, there is a strong basis for research set in the theoretical foundations of services marketing and management that empirically investigates attraction visitor behaviour by developing a conceptual model that explains the relationships between service quality, perceived value, satisfaction and behavioural intentions.

### 1.7 Significance of the study

Studies specifically addressing issues in visitor attraction service quality are rarely reported. Therefore, in achieving the aim and objectives outlined below, this study would contribute to the attraction management and services marketing literature by conceptualising quality as a formative construct and developing a valid and reliable scale for evaluating visitor attraction quality. This approach helps to overcome the weaknesses identified by Dabholkar *et al* (2000); Brady and Cronin (2001) and Zabkar *et al* (2010) in the conceptualisation of quality as reflective construct.

A further contribution to knowledge is the study's examination of the relationship between perceived service quality, perceived value, satisfaction and behaviour intentions in the tourist attraction sector. This is the first study to empirically test a model comprising of these particular services management constructs within this sectoral context. Moreover, the research includes a comparative analysis of two different types of attractions, X (a theme park) and Y (a heritage attraction), to examine the generalisability of the model. As stated earlier, the study also examines the moderating effect of visitor socio-demographics on their perceptions of quality and value, and on their overall satisfaction and behavioural intentions.

Lastly, this study provides a practical tool for managers to measure the quality and value of their attractions and identify the relative contribution of attraction features to visitor satisfaction and behavioural intention. It also identifies practical managerial implications of the findings for the UK attraction sector and makes recommendations in relation to resource management and the implementation of marketing strategies.

### 1.8 Aim and objectives

This research aims to explore issues in service quality within the UK visitor attractions sector. The main focus is to understand how visitors to attractions evaluate quality and to determine the relationship between perceived quality, value, customer satisfaction and behavioural intention.

### 1.8.1 Specific objectives

- Delineate the constructs of perceived quality, value and customer satisfaction and establish how they influence behavioural intentions.
- Determine the factors that contribute to visitors' perception of quality and value.
- Determine the factors that most influence visitors' perception of quality and value.
- Examine the effect of sociodemographic characteristics on the perception of quality
- Formulate and test a conceptual framework for understanding the relationship between perceived quality, value, customer satisfaction and behavioural intensions at visitor attraction level.
- Compare the differences in perceived quality, value, customer satisfaction and behavioural intensions between two types of visitor attractions - heritage attractions with enactment and theme park.

## 1.9 Scope of the study

This study is limited in scope to visitor perceptions of attraction quality at the Blists Hill Victorian Town and Alton Towers sites. It examines the relationship between perceived quality, value, satisfaction and behavioural intentions and the differences in these variables on the basis of visitor gender, age and occupation (as a measure of social class). The study empirically tests a model of perceived quality as a formative construct and the relationship between quality and value, satisfaction and behavioural intention.

## 1.10 Thesis outline

This chapter presented a synopsis of the study and discussed the importance of visitor attractions in tourism development. It presented an overview the services management construct - perceived quality, perceived value, customer satisfaction and behavioural intentions vis-à-vis visitor attraction management. In addition, the rationale for the study, significance of study, the aim and objectives, and study scope were presented.

Chapter two presents a review of the pertinent literature in attraction management, service quality, perceived value, customer satisfaction and behavioural intentions. This provides the context for the study and the theoretical basis of the conceptual framework whilst informing the primary research design.

In chapter three, the research methodology is discussed. The chapter starts with the general framework of the research and reiterates the research purpose. It then establishes the nine main research propositions and summarises the conceptual framework that explains the relationship between the four services management constructs. The two-phased process of the research methodology is then discussed. Firstly, the visitor attraction attribute scale development is examined. Secondly, the survey itself, including sample size and type are discussed. Question formulation, questionnaire design, pilot test and ethical considerations are also discussed; this chapter also includes a discussion of the validity and reliability of the instrument.

Chapter four reports the findings from the research. It includes the testing of the relationships between the constructs in the conceptual framework and the moderating effect of visitor sociodemographic characteristics on perceived quality, perceived value, customer satisfaction and behavioural intentions at both the Alton Towers and the Blists Hill Victorian Town sites.

Chapter five presents the conclusion of the thesis by summarising the key findings of the study, discussing its theoretical contributions and managerial implications, examining the limitations of the research and making recommendations for further research.

# Chapter Two

# Literature Review

## 2.1 Introduction

This chapter present the review of pertinent literature relating to visitor attraction management on the one hand and service quality, perceived value, customer satisfaction and behavioural intentions on the other. The first part reviews relevant literature in attractions management, exploring the scope of the industry and the attraction product. The second part focuses on delineating the service constructs - service quality, perceived value, customer satisfaction and behavioural intentions and explores the relationships between them. The review of the relevant literature has been carried out to underpin the theoretical framework for the study and inform the primary research methodology.

## 2.2 Visitor attractions: definition, scope and classification

Visitor attractions have been identified as the nucleus of tourism development and often than not are the motivator for travel to most destinations. Despite the identified role of attractions in tourism development, it has been argued that the study of attractions has not received as much attention as other areas of tourism such as destination management, tourism motivation and travel intermediaries to mention just a few. Like many concepts, the term attraction is besieged with debate and argument particularly in terms of definition and classification. For instance VisitScotland's definition (2004 in Page and Connell, 2009) has been criticised as too specific and deliberately narrow to accommodate harmonising statistics in order to ascertain volume and value of the attraction sector. Page and Connell, (2009) argue that the definition excludes growing areas of

destination attraction like shopping, images and locations viewed in films and television which draw people to visit a given destination. Also, it does not take unique, periodic and non-permanent events and festivals into account and fails to recognise a destination's natural, social, architectural and cultural resources that serve as attractions to visitors. They therefore advocate a broader definition that will allow recognition of a wide range of different types of attractions.

For the purpose of this study, Pearce's (1991) definition is adopted. According to Pearce (1991:46) "a tourist attraction is a named site with a specific human or natural feature which is the focus of visitor and management attention". Although this definition is not without its own weakness because some events and festivals that are attractions in their own right, may not necessarily be referred to as a named site.

The attractions sector consists of the built environment and the natural environment, in addition to cultural resources, products, festival and events which are developed and managed to offer interesting and enjoyable experience to the visitor (Page and Connell, 2009). Classifying attractions is also as problematic as defining them. According to Millar (1999) the Tourist Boards in the UK identified five major categories of visitor attractions namely – historic properties, gardens, museums and art galleries, wildlife attractions and 'other' attractions. Swarbrooke (1995) classifies attractions into four types: natural, man-made but not originally designed primarily to attract visitors, man-made and purpose-built to attract visitors and special events.

## 2.3 Visitor attraction development

Wanhill (2008a) noted that the term development, albeit of new commodities, has been described variously by different disciplines such as economics, marketing and engineering. Whichever way this term is defined, development including that of visitor attractions is not evenly distributed and are therefore irregular in their occurrence. A place, site or event attains the status of an attraction only when notable value has been added to it, and the information regarding the value added subsequently communicated to existing and potential visitors in marketing the site or event (MacCannell, 1976). Going by this argument value adding will have to take certain pattern or take place in a particular framework. Swarbrooke (2002) identified five types of development relating to construction of new and upgrading existing attractions.

The first one is said to be wholly new purpose-built attractions on a site not previously used as attractions. This type of development requires that all factors of production namely capital, land, man power and other productive inputs are sourced afresh offering a wide range of choices albeit tough decisions to be made. An example of this type of development is Disneyland, Paris where approximately 1200 possible European locations for the construction of the park were initially listed before being reduced to four and the site in Marne-la-Valle was eventually selected for its accessibility and proximity to Western Europe. Another good example of this type of development is the Blists Hill Victorian Town. The site had been an industrial area with remains including Blast Furnaces and a Brick and Tile works. Most

of the exhibits were brought from afield and subsequently ‘housed’ in the ‘Victorian Town’.

The second type of development identified is regarded as ‘New purpose-built attraction developed on sites that were previously used as attractions’. Swarbrooke (2002) cited the UK example of the taking over of the collapsed Windsor Safari Park by the Lego Group. This type of development comes with benefits and demerits. If the predecessor attraction was performing well, the new owners may cash in on the goodwill of the past operation if the new owner intends to continue in the same line of business. However, if the old attraction had a bad reputation in terms of service delivery and/or poor perception of quality by visitors, the new organisation may inherit a bad legacy. If a strong brand is taking over, this issue may be ameliorated by the power of the brand that is taking over. Again, where the new business differs like the case of Legoland and Windsor Safari Park, a number of expenses would inevitably directly or indirectly be incurred, which may add up to the cost of acquisition of the site. Typical example in the Legoland-Windsor Safari case includes the transfer of Dolphins from the park to Harderwijk Marine in the Netherlands and the disuse of some expensive themed features and facilities.

The third type of development is where an existing attraction adopts penetration and/or product development strategy by having major new developments aimed at retaining existing visitors and attracting new markets. This is very common in the attraction sector particularly theme parks where new rides are introduced periodically. It is noted that between 1953 and 2008

about 40 rides and attractions have been withdrawn in Alton Towers due to either the rides being outmoded or not favoured by visitors (Alton Towers Almanac, 2011). Development of this type is basically embarked upon to rejuvenate tourism product life or prevent decline. Plog (1973) associated destinations growth to the kind of visitors attracted indicating that destinations [also applicable to attractions] progress along a scale in relationship to diverse markets at different stages as outlined by Butler (1980). Plog (1973) submits that decline is inevitable as destinations become older and less attractive. This assertion, to a very large extent, explains why this type of development is rampant in tourism.

New development at existing attractions which is the fourth category of development according to Swarbrooke (2002) is aimed at improving visitor amenities and encouraging secondary spending. This again is very common in the visitor attractions sector. A typical example is the 2005 redefining of Shugborough's intrinsic qualities and revamping of the augmented services and facilities such as site transport system, car parking facilities and access arrangement, toilets, signage, ticket office and catering operation. This type of development will require some background research into what sort of activities will bring about secondary spending or what amenities visitors deem as 'attractive quality' (Kano, 2001) at a given site. Since quality is context specific managers need to recognise features that are relevant to their sectors. Not only should managers be able to identify appropriate quality features that are the basis of visitors' quality perception formation (see detail discussion in section 2.5), they also need to be acquainted with their implications for service

delivery. Management commitment and direction are quite essential here with demonstration of creativity; development of this type often brings about rejuvenation of attractions.

The fifth category is the creation of new major events or the hosting of mega events. McDonnell *et al* (1999) and Hall (1997) describe mega events as having huge capital outlay and high public financial involvement. The compelling aspects of mega events are the necessity for building facilities and their tendency to attract global attention and big media coverage with subsequent high socio-economic impacts and legacies. Typical examples of mega events are the FIFA World Cup and the Olympic and Commonwealth Games, all which require building of facilities for the games (for example main bowl arenas, training pitches and courts); welfare purpose (living quarters for participants and officials) and business and inward investment (for instance conference facilities, shopping malls and other entertainment amenities). However, this category is outside the scope of this project.

It is important to note here that an attraction can combine two or more development types identified by Swarbrooke (2002), such as being a new purpose-built attraction on sites used before for attraction business, encouraging secondary spending by improving visitor facilities and redeveloping its product and expanding its market reach. Notable attractions like Disneyland, LEGOLAND and Alton Towers are typical examples in this respect.

Wanhill (2008a) however takes a different perspective to attraction development by identifying three key features to be cognisant of in developing attractions. The three key aspects identified are imagescape, location and market. Wanhill (2008a) used the term imagescape to represent the attraction product concept (the concept of attraction product is further explored in 2.4). Imagescape condenses history and culture in time and space into marketable entertainment experiences (Wanhill, 2008b). The term derived from the use of tangible objects set within the context of a specific theme or image in a given environment that should be innovative enough to generate some sort of appeal. The principal aim was to confer some memorable mood benefits to the visitors, consequently leading to repeat visitation and possibly positive word of mouth recommendation (Wanhill, 2008a). This assertion follows the consensus in the services management literature that there is some sort of relationship between the performance of product attributes and other service constructs such as satisfaction, benefit, value and behavioural intentions (see Baker and Crompton, 2000; Petrick and Backman, 2002; Petrick, 2004 and Hutchinson, Lai and Wang, 2009). Wanhill's (2008a) idea implies that attraction development does not necessarily follow only commercial logic of filling an existing gap in the market. Developers could cash in on availability of suitable location or can have their starting point of development with an attraction theme and/or idea (attraction product concept), then source for location, and create demand for the product.

## 2.4 The attraction product

The growing interest in attraction competitiveness has no doubt brought about focus being directed towards the definition and description of the attraction product, and how visitors consider its different parts (Mehmetoglu and Abselsen, 2005). The process by which a site or event is transformed into a visitor attraction is tourism's unique ability to turn natural or man-made resources into products that visitors must travel to consume (Prideaux, 2002). Lewis and Chambers (1989 in Swarbrooke, 2002) describe a product as an offering of a business as perceived by both its existing and prospective customers. In turn, it is an amalgam of benefits aimed at satisfying the needs and wants, and to solve the problem of, specified market segment, hence the utility of a product derives from what it can do or actually does to the customer. Swarbrooke (2002), applying the idea above to the attraction context, pointed out that the attraction product is mainly experiential, consisting of both tangible and intangible elements. Tangible elements will include such attraction features as: rides, physical artefacts, historic buildings and food and food items. Intangible elements include abstract features such as excitement and other type of feelings associated with coming in contact with and/or using physical resources in an attraction.

The attraction product is essentially a service consisting of an intangible experience of limited duration within a transitory, managed environment, albeit with memories that go along with the visit which can be treasured or despised as the case may be. By its nature, and like any other services, the production and consumption of attraction products are inseparable. A visitor to an

attraction will have to be present at the point of production for the experience to be consumed. More importantly, staff involvement in service delivery is part of the product itself. Hence the service provider's behaviour, attitude and knowledge of the product, and disposition form a vital component of the product. Although in minor cases, such as service providers in the maintenance of footpaths/trails, this may not be applicable. In adding to the complexity of the attraction product, visitors are themselves co-producers impacting on their own and fellow visitors' experiences (Bitner *et al.*, 1997, Baker and Crompton, 2000; Gouthier and Schmid, 2003; Richards and Wilson, 2006).

Attraction products can be wide ranging in terms of imagescape, hence they may vary as much as the number of ideas that can be conceived by planners, managers, investors and other key players in the industry. Wanhill (2008a) listed a number of attraction products based on imagescapes (see Table 2.1). Wanhill (2008a) submits that the imagescape is the nerve centre of the attraction product; this theorisation is in line with Kotler's (1994, 1997) conceptualisation of the product levels in terms of benefits sought by consumers.

In the same vein, Swarbrooke (2002), borrowing from Kotler (1994), conceptualises the attraction product as conferring to the visitor core, tangible and augmented benefits. The core product represents what the visitor is really buying – the main benefit(s) identified as the personal need to be satisfied by the product. In an attraction context, the core products/benefits are often intangible, subjective attributes, hence the purchase of attraction product may

be perceived as 'risky' as the central product purchased or intended to be purchased cannot be examined beforehand. To allay 'fear' of risk, managers and marketers of the attraction product may have to turn the core product into a tangible (Swarbrooke, 2002) or basic product (Kotler, 1997). Kotler (1997) incorporates another layer in between the basic product and augmented product level – expected product. According to Kotler (1997), the expected product represents a set of attributes and conditions the visitor normally expects and accepts when buying the product. The fourth level of Kotler's (1997) model is the augmented product, which Wanhill (2008a) describes as support service/augmented imagescape. Swarbrooke (2002) noted that the augmented product includes all the additional services and benefits the visitor gets in both tangible and intangible forms. In addition to this, Wanhill (2008a) expatiates further that the augmented imagescape is designed to ensure that visitors' experiential requirements are satisfied.

Table 2.1 Range of Attraction Imagescapes

| **Imagescape** | |
|---|---|
| Armed forces | Industry |
| Art and media | Miscellaneous |
| Built environment | Myth and fantasy |
| Childhood | Natural world |
| Civilization | Physical world |
| Dark subject | Politics |
| Entertainment | Religion |
| Famous and notorious | Retailing |
| Food and drink | Science and discovery |
| Future | Society and culture |
| History and heritage | Sport |
| Hobbies and pastimes | Transport |
| Human body | War and conflict |

Source: Wanhill, 2008a

In an empirical study of 573 visitors to a Northern Norway heritage museum, Mehmetoglu and Abselsen (2005) employing the three level attraction product model, found that the museum's attraction product consists of learning, status, novelty (core), staff service, visual and information (tangible), ancillary features, and easy access (augmented) features. The findings, in addition, disclose that only ancillary characters and learning features of the augmented and core product components, respectively, have a major influence on visitors' satisfaction with their overall experience at the museum, whilst both dimensions of the tangible component are considered the most significant factors.

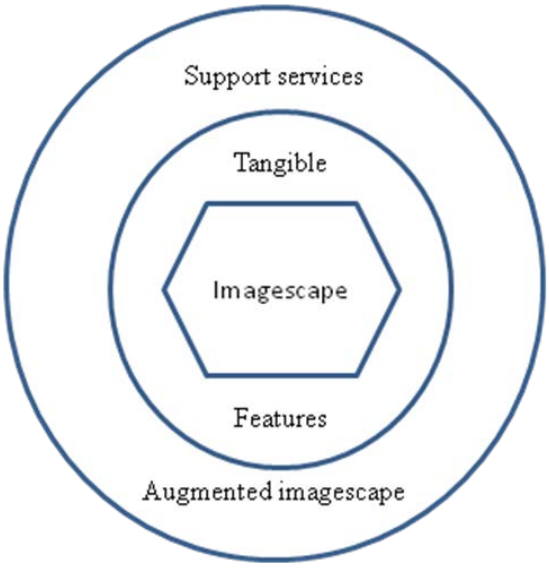


Figure 2.1 The Attraction Product Source: Wanhill, 2008a

Whilst Swarbrooke (2002) argues that Kotler's (1994) model was put forward with the manufacturing sector in mind, even though applicable to the attraction product, it was noted that the model assumes that all the elements in the augmented product are under the control of attraction operators. Vital features such as weather condition and behaviour of co-visitors, which to no lesser degree influence satisfaction, were not considered. However, Kotler's (1997)

model incorporates two more levels, the expected and future products, which are the third and fifth levels, respectively.

### 2.5 Attraction success criteria

The need for visitor attractions to succeed cannot be overemphasised. Apart from the investments that go into the sector from both public and private purses, some destinations rely on the sector for employment and income generation. The prevailing global economic crisis somewhat favours domestic tourism in general and the attraction sector in particular in the UK, as people are staying and having their holidays within the country. VisitEngland's annual report on visitor attractions trends in England for 2009 indicated a 5% overall increase in visitor admissions, which is a remarkably stronger increase over the three previous years (BDRC Continental, 2010). Despite this boom, the environments in which visitor attractions operate make failure, in some instances, imminent. Take for example the intense competitive nature of the attraction business, particularly in countries like the United Kingdom where more than 100 attractions are opened in a year (Stevens, 2003).

Swarbrooke (2002) also noted that thousands of individuals and organisations propose establishing new visitor attractions year in and out but only a minority of these proposals will ever materialise. Many new attractions have been noted to go into liquidation prematurely. Stevens (2003), in line with this trend, wrote that real fear exists for the availability and survival of some outmoded type of attractions. However, whilst outmoded, ill-funded, inefficiently developed attractions are experiencing difficulties and thereby failing, some visitor

attractions will continue to enjoy success. Although success is somewhat difficult to guarantee, particularly with unpredictable external political (terrorism, political unrest in North Africa and the Arab world) and environmental (earth quake and tsunami in Japan) dynamics, there are some factors that have been toned to contribute to success in attraction operations.

Swarbrooke (2002) presented four groups of factors namely: the organisation and its resources, the product, the market and the management of the attraction. The first group of factors will include organisational structure and culture, management style and skills, the workforce and finance. Swarbrooke (2002) suggested that finance is by far the most important resource crucial to the successful development of an attraction. Finance is crucial as most attractions, particularly mega projects like Dubailand, are capital intensive albeit there are others, like craft centres, that require moderate capital for take-off. Nevertheless, finance will be required all through the life cycle of any attraction whether as running cost or refurbishment capital.

The second group, the product, has been dealt with in much more depth in section 2.4. The role of the product in the success of attractions nevertheless cannot be overemphasised particularly in an intensely competitive environment with discerning and demanding visitors. Successful attractions have been identified as those that are based on novel and unique products (Swarbrooke, 2002). Even then, novelty and uniqueness of an idea will have to be married with other factors.

The market is the third group of factors identified. As part of the feasibility plan of any attraction, managers must have identified the group of people to be targeted. In addition to this, there is a need to identify viable and explore segments. Swarbrooke (2002) pointed out that successful attractions are those that readily tap into emerging and growth markets and consumer behaviour trends. Ability to identify and satisfy the needs of appropriate markets is the cornerstone to successful attraction operation. The need for in-depth knowledge of the characteristics of the market(s) is equally important. The common basis of market segmentation includes visitors' characteristics such as demographics, socio-economic behaviour, consumption pattern and attitude to and preference for attractions.

Finally, the fourth category revolves around management of the attraction. It will be acceptable to infer that successful visitor attractions are those that are effectively managed. Management functions and activities that enhance productivity, marketing, finance and account keeping, planning, people's management, maintenance of standard and continuous improvement and customer service management would be crucial in ensuring successful attractions operation. The management functions in any given organisation, including visitor attraction, are inexhaustible however, some operational issues are particularly important in certain industries/sectors. For instance, Ahmadi (1997) contends that managing capacity and flow is crucial in the operation and management of theme parks (and many other attraction types). Capacity is the ability of an organisation, within the scope of its resources, to process information, render services and meet the needs of its customer. It is an

amalgam of an organisation's systems, equipment, labour and facilities required to create a given service. Capacity in attraction operation will include the following: the number of workers available to serve visitors in any given period, the number of seats available in site cafeteria/dining room and the number of visitors that a site can physically hold before the quality of the visitors' experience is adversely affected. It is very important when designing and developing an attraction, that developers and planners consider the appropriate level of capacity to meet the projected visitor numbers; this ensures effective management of the visitors' experience and optimal use of resources.

In day to day attraction operations, capacity management is an integral management function that seeks to harmonise the level of operations with demand in order to obtain a balance between costs and service provision. Capacity management is a crucial function of the operations team that aims to match the level of capacity to the level of demand in terms of quantity and the skill set required to meet the service specification.

The success of attraction operations is dependent upon the ability to manipulate demand to match capacity; hence, sound knowledge of and ability to predict demand becomes essential. The ease of harmonising demand with capacity differs from attraction to attraction and will depend on type, size and complexity of operation, and other external circumstances and/or factors (for example weather, host community behaviour) outside the control of the operator. Normally, in the service industry, including the attractions sector, predicting demand can be a daunting exercise; however, attraction managers

must endeavour to make predict demand as far as possible. The ability to predict demand is the basis for formulating a suitable operational plan to manage the visitors' experience.

Wanhill (1980) suggested a number of ways in which the difficulties caused by excess demand may be addressed; these include: introducing a booking or ticket system, restricting access, diversifying points of interest, not advertising the attraction, or reducing secondary amenities. To this end, efforts are often focused on shifting demand from peak to off-peak periods or from popular rides/exhibits/service to less popular and ancillary ones. Pricing policy is also often employed as an effective technique in managing visitor flow. Wanhill (1980) concluded that the difference between non price methods of restricting demand and congestion pricing is that the former tend to be cost-oriented from the standpoint of managing the attraction, whilst the latter is revenue oriented.

Any organisations that lag behind in these areas might find it difficult to stay afloat. Inefficiency in one or two aforementioned areas may render an attraction unpopular. McKercher *et al's* (2004) investigation of cultural attraction in Hong Kong, employing in-depth interviews to elicit information from industry managers, identified why some attractions are more popular than others. Five different categories of factors were noted: product, experience, marketing, culture, and leadership. The study found that factors pertaining to product, experience, and marketing are central to popularity.

Martin and Mason (1993) identified three key criteria for visitor attractions to be viable. These are: setting and monitoring performance standards, continuous improvement and meeting visitors' changing needs, and attracting new visitors and facilitating repeat visit. The conclusion of Martin and Mason's (1993) study was that attractions have to cater for visitors who are more demanding and discerning in addition to being more active and more purposeful in the choice visitors make concerning the attractions they visit, revisit or recommend to friends and family. There is no doubt that Martin and Mason's (1993) predictions of the move away from passive fun to active learning, and emphasis on the quality and genuineness of visitor experience being crucial to future success in a competitive market are still true today.

## 2.6 Consumer behaviour

The study of consumer behaviour requires the examination of a range of processes internal and external to the individual. In order to understand behaviour, it is essential that the complex network of interacting, influencing elements is explored (Moutinho, 1987). Moutinho (1987: 5) defines consumer behaviour as 'the process of acquiring and organising information in the direction of a purchase decision and using and evaluating products and services.' The process referred to in the above definition encompasses a number of stages: search, purchase, use, evaluation and disposal. Mowen and Minor (1998) group the stages involved in consumer behaviour into three principal phases: acquisition, consumption and disposition. The following sub-sections explore these phases further.

### 2.6.1 The acquisition phase

Hoyer and MacInnis (2004) refer to this phase as the process by which a consumer gets to obtain a product or service. The acquisition phase involves the analysis of factors influencing visitors' service choices. Mowen and Minor (1998) note that most of the research in consumer behaviour focuses on this phase. It comprises of information search and decision making processes. One important concept to note in this phase is the concept of involvement, which has been widely cited in consumer behaviour research.

#### *2.6.1.1 Involvement*

Involvement as a concept is a crucial tool in explaining buying behaviour and decision making. Hoyer and MacInnis (2004) describe involvement as the final outcome of motivation that evokes a psychological state in a consumer. In the literature involvement has been described and classified in a variety of ways using terms such as high, low, emotional, situational, cognitive, enduring, affective, ego and purchase (Engel *et al*., 1995; Beatty *et al.* 1988; Hoyer and MacInnis, 2004)**.**

According to Beatty *et al.* (1988) there are two types of involvement: ego involvement and purchase involvement. Ego involvement depicts the importance of the product to the individual and to the individual's self-concept, values and ego. On the other hand, purchase involvement may be defined as the level of concern for, or interest in, the purchase process stimulated by the need to consider a given purchase episode.

In another light, Hoyer and MacInnis (2004) offer a framework of involvement based on five objects of influence namely media, advertisement, product category, brands and purchase decision and behaviour. The advertising domain depicts involvement as the personal relevance of the receiver to advertisements in relation to being personally affected and consequently motivated to respond to the advertisements. The product class domain sees involvement as focussing on relevance of product to the needs and values of consumers hence their interest in product information. The purchase decision domain lays emphasis on the relevance of the decision and subsequent careful purchase decision by the consumer.

In behavioural terms, Engel *et al.* (1995) advocate that involvement be measured with the time spent in product search, the energy spent on product and information search, the number of alternatives examined and the extent of the decision. It takes the form of a continuum ranging from low to high and can best be conceived as a function of person, object and situation. Engel *et al.* (1995) submit that the degree of involvement is the sole factor that determines the type of decision-process behaviour that the consumer will exhibit. Going by Engel *et al.* (1995) classification it can be said that the attraction product will fall into the low involvement category. It can be, by rule of thumb, argued that time and energy spent on information and product search will be minimal; decision-process is also likely to be less complicated compared to decision-process behaviour regarding a long-haul family annual holiday.

*2.6.1.2 The decision making process*

All products and services, including the attraction product, the visitor uses would have been involved in a decision making process (Jansson-Boyd, 2010). Decision making involves identifying and choosing alternatives based on the values and preferences of the decision maker. Making a decision means that there are alternative choices to be taken into consideration and not only that, the decision maker has to identify as many alternatives as possible, but also has to choose the one that has the highest probability of success or having the best effectiveness. Another choice to make would be to determine which service best fits the goals, desires, lifestyle and values of the decision maker.

*2.6.1.3 The consumer choice process*

The consumer choice process is one of the stages consumers go through in their decision process. Mowen and Minor (1998) based their analysis of this stage on alternative approaches to predicting choice. The major areas highlighted in their work are: (1) High-involving choice comprising of compensatory models and Phased models; (2) Low-involvement models which include Conjunctive rule, Disconjunctive rule, Elimination by aspect, Lexicographic rule and Frequency heuristic; (3) Experiential choice process which comprises of Brand loyalty purchase, Affect-referral heuristic and impulse purchase; (4) Noncomparable choice processes and (5) Store choice.

The salient point in the analysis is that brands, services, goods or even establishments will be evaluated based on specific attributes. This is comparable to the process of evaluation of product quality based on

identification of the product quality dimension (see Parasuraman, Zeithaml and Berry, 1988; Cronin and Taylor, 1992; Frochot and Hughes, 2000). In Mowen and Minor's (1998) analysis the choice making will be greatly influenced by the type of decision process consumers engage in and the decision process could be viewed from high or low involvement or experiential perspective. Consumers under high-involvement condition, for example buying an expensive family annual holiday, act as if they are employing a compensatory model where they analyse products based on their attributes and allow highly rated attribute(s) to compensate for lowly rated one(s). Employing this model, the sum of all information on a brand's attribute forms the overall judgment; consequently, a brand may not necessarily be rejected as a result of low rating on a particular attribute. On the other hand, in a low involvement situation consumers have been found to behave as if they adopt a noncompensatory model of choice (Mowen and Minor, 1998). In this instance, high ratings will not compensate for low ratings on any particular attribute; here a given attribute is compared from one product to another and the one with the highest rating is chosen.

Most of the theories underpinning this analysis help in explaining how consumers make choices among alternative products or organisations that are similar or dissimilar as the situation may be. However, the Compensatory model, Conjunctive rule and Disconjunctive rule can help in explaining the stages of quality evaluation.

### *2.6.2 The consumption phase*

Research in the consumption phase is increasingly growing. The consumption phase relates to how consumers actually use a product and the experience derived from its use. The experience derived here can be referred to as consumption experience. The importance of consumption experience cannot be overemphasised in tourism. It is often the pull factor - the main reason for visitors to take part in a given event or visit an attraction. Use to which a product is put is at the centre of consumer behaviour. Use/benefit/value has important symbolic implications for consumers of tourism (Urry, 1995), and related products. Use also influences subsequent behaviour for example, repeat visitation, complaint and word of mouth.

The notion of consumption experience is a key element in understanding consumer behaviour. However, there have been debates about the scope of the consumption experience. According to Arnould, Price and Zinkhan (2002), consumption experience is spread over a span of time and can be divided into four key stages. The first stage is the pre-consumption stage which includes the visitor's search for information, planning for the visit and the excitement that is involved with waiting and looking forward to the visit. The purchase experience is the second stage and this involves choice making and the encounter with the service environment. The third stage is the core consumption experience. This denotes the thrill, satisfaction/dissatisfaction, feeling of novelty, and feeling of adventure and a host of other psychological states associated with the main imagescape and other supporting services. The last stage is the remembered consumption experience, which relates to

memories and nostalgic feelings brought about by discussion with relatives and friends or souvenirs and photographs. Arnould *et al* (2002) postulate that the consumption phase comprises of two major stages: the purchase and core consumption experiences. It is clear that Arnould *et al*'s (2002) model takes a holistic view of the consumption experience. Whilst this global view is useful, it is important to examine the distinct stages, hence looking at the consumption phase as the actual benefit a product is likely to provide may yield a superior explanation of visitors' behaviour.

Tourism products in general and attraction products in particular are mainly experiential and this highlights the role and importance of individual consumer judgments. Experience is an indistinct notion that is difficult to define and measure because of its multiple elements and individualised, personal nature (Knutson and Beck, 2003).

### *2.6.3 The disposition phase*

The disposition phase denotes what visitors do with a product, an attraction product in this case, after use. The phase addresses satisfaction level post purchase and use of a good or service. Visitor satisfaction, their perception and evaluation of quality and value and their subsequent intention to revisit or be loyal to an attraction are aspects of customer behaviour which evolve over the duration of the customer experience.

## 2.7 Perspectives in conceptualisation of service quality

The concept of service quality has gained a wide interest in the literature in the past few decades and has been defined variously. A number of researchers have examined the construct in different contexts and developed different types of measures to help in defining, measuring and improving understanding of the construct. However, the concept has generated much controversy amongst academics particularly in the areas of its relationship with satisfaction (Baker and Crompton, 2000; Gronroos, 2000) and whether there is a generic set of dimension applicable to all service sectors (Parasuraman *et al*., 1985; 1988).

Grönroos (2000) submits that the notion was intended to answer the question 'how is the satisfaction-providing process perceived by customers of services?' It was conceived and developed to provide the services equivalent of product features and help researchers and practitioners to understand the need-satisfying elements of a marketing model in a service context. Grönroos (1984) and others like Parasuraman *et al* (1985, 1988), Taylor and Cronin (1992) and Frochot and Hughes (200) have succeeded, to a large extent, in identifying what features customers look for in service quality.

Perception of quality in the service context can be studied from customer or service provider perspectives. Exploring these two perspectives, researchers have noted that gaps do exist in the perception of quality between providers and consumers. This observed quality perception gap underlines the necessity of studying quality from the viewpoint of the consumer as ultimately; the tourist decides which product to consume. This approach has been called the

"perceived quality" approach (Garvin, 1984). Researchers in the "perceived quality" approach use the term perceived quality instead of quality in emphasising the dependence of quality judgments on the perceptions, needs, and goals of the consumer (Steenkamp, 1990). The commonly cited definition for service quality is the one put forward by Parasuraman *et al* (1985) denoting service quality as the overall evaluation that results from comparison between a customer's (visitor's) expectation and service received from a provider. Based on this, service quality is the extent to which a visitor's expectation and delivered service are similar or different. However, Steenkamp (1990) submits that the theoretical underpinnings of most definitions of perceived quality have not been clearly formulated even where rationales for the definition are provided; most of the definitions are not based upon a rigorous examination of the literature.

The use of the customers' viewpoints in exploring service quality is exemplified by two schools of thought: the Scandinavian school and the United States school (Williams & Buswell, 2003). The Scandinavian perspective on the conceptualisation of service quality defines the dimensions of service quality in a universal term as possessing two dimensions - functional and technical quality; and the American perspective defines service quality in terms of five service characteristics – empathy, tangibility, assurance, responsiveness and reliability as proposed by Parasuraman *et al*. (1985). Both of these perspectives are based on disconfirmation paradigm.

The Scandinavian perspective emphasises a more holistic idea about quality based on technical and functional dimensions and customer relationships (Gronroos, 2000). The United States' school of thought sees visitors as information processors and employs the confirmation/disconfirmation paradigm to operationalise service quality, which is the more common research approach in service quality studies (Gummesson, 2001). Perhaps the most popular work in this area is that of Parasuraman *et al* (1985).

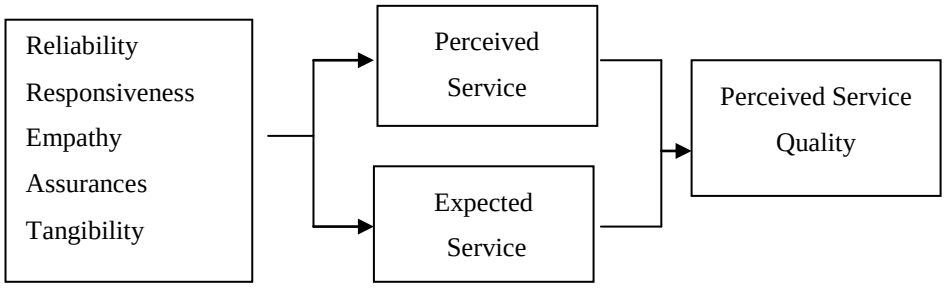


Figure 2.2 Perceived Service Quality Adapted from Parasuraman, *et al.*, 1988

### *2.7.1 Dimensions of service quality*

According to Ekinci and Riley (2001) there are two main sources of dimension development; they are either formed conceptually through argument or derived from factor analysis. The dimensions are often set in models as seen in Gronroos (1984) and Parasuraman *et al.*, (1985; 1988). Over the years, a number of writers have put forward various theories regarding the dimensions of quality. Parasuraman *et al* (1985) provided a list of ten dimensions of service quality as a result of their focus group studies with service providers and customers; the dimensions comprise access, communication, competence, courtesy, credibility, reliability, responsiveness, security, understanding and tangibles. Berry *et al.* (1985) posit that the relative importance of the categories

would vary from one service industry to another although it was claimed that most consumer service sectors are covered by the list. However, the ten dimensions were later reduced to five as a result of a high degree of correlation found between communication, competence, courtesy, credibility and security, on one hand, and, access and understanding on the other. Hence, two broad dimensions of assurance and empathy were formulated in conjunction with tangibles, reliability and responsiveness to form the basis of SERVQUAL, the service quality measurement instrument. Zeithaml *et al.* (1990) submitted that irrespective of service organisation/industry being considered, reliability is the most important dimension, followed by responsiveness, assurance and empathy.

Parasuraman *et al*'s (1985) work has attracted criticism; its applicability to a wide range of service sectors has been questioned (see Finn and Lamb, 1991; Hughes, 1991; Pearce, 1991; Cronin and Taylor, 1992; Crompton and Love, 1995; Oh, 1999). Notable among the critics of this work were Cronin and Taylor (1992), who pointed out that the scale items that define service quality in one industry may be different in another contrary to Berry *et al.*'s (1985) claim that the dimensions are applicable to a wide range of service sector. Finn and Lamb (1991) submitted that Berry *et al.*'s (1985) model's five dimensions were insufficient to cover quality in a retailing setting.

Johnston *et al.* (1990) tested the comprehensiveness of Parasuraman *et al.*'s (1988) service quality dimensions in an empirical study involving ten UK service organizations. The research not only supported the initial ten service

quality dimensions, but also extended it to 12: access, appearance/aesthetics, availability, cleanliness/tidiness, comfort, communication, competence, courtesy, friendliness, reliability, responsiveness and security. Unlike Parasuraman *et al.* (1988), Johnston *et al.* (1990) did not use customer data in order to identify the determinants of service quality; the work only drew on management perceptions of service. Johnston and Silvestro (1990) went on to add the customer's perspective to the 12 service quality characteristics. This led to the identification of an additional five service quality determinants: attentiveness/helpfulness, care, commitment, functionality, integrity; it also led to a refining of some of the other definitions. Johnston *et al.* (1990) and Finn and Lamb, (1991) viewed the refinement of the original Parasuraman *et al's* (1985) service quality dimensions as an unnecessary exercise that reduces its chances of being able to capture quality characteristics of some sectors adequately even though their research did not support the general applicability claim of Berry *et al* (1985).

Grönroos (1990) postulated six criteria of perceived good service quality: professionalism and skills; attitudes and behaviour; accessibility and flexibility; reliability and trustworthiness; recovery; reputation and credibility. Grönroos (1984, 1990) suggests that service quality consists of two dimensions; firstly, the technical dimension, which represents what customers receive as the outcome of a process, and secondly, the functional dimension; the latter represents how the process functions. A dynamic aspect, image, was also introduced as customers constantly bring previous experiences and overall

perceptions of a service organisation to any given service encounter. The image functions as a filter in service quality perception.

Armistead (1990) divided the dimensions of service quality into “firm” and “soft”. The firm dimensions are time including availability, waiting time and responsiveness; fault freeness including physical items, information and advice; and flexibility comprising of service recovery ability and ability to customize the service or add additional services. The soft dimensions are style - staff attitude, staff accessibility and ambience; steering - the extent to which customers feel involved in making decisions that affect them; and safety comprising of trust, security and confidentiality.

Whilst the services management literature and tourism literature alike are not short of ideas on service quality dimensions, the consensus is that no one set of dimensions can capture the conceptualisation of service quality in every sector. In order to have a practical utility, the service quality construct should be operational and context specific (Dabholkar, Shepherd and Thorpe, 2000; Olorunniwo and Hsu, 2006).

### *2.7.2 Attribute formation*

Most works have treated service quality as comprising of components or dimensions including Grönroos (1984) and Parasuraman *et al* (1985). As stated above Dabholkar *et al* (2000) observe that mostly at the initial stage of building a literature stream, constructs are defined in terms of components and as the literature advances, some of the components are regarded as antecedents to

provide better understanding of the phenomenon being studied. This is slow in manifesting itself in the case of the service quality construct; most works still concentrate on determining the dimensions of service quality in different sectors.

### *2.7.3 Perception formation*

Perception is the process by which an individual receives, selects, organises and interprets information to create meaningful picture of the environment (Harrell, 1986). In tourism this is the process through which an individual selects and organises the attributes of a tourism/attraction product that are seen as being significant in contributing to their satisfaction. Perception helps an individual to make sense of the environment by translating stimuli from the external physical world to the internal, mental world through human experience (Wilkie, 1990 in Decrop, 2006). Perception is a selective and interpretive process made up of three basic cognitive operations: sensation, attention and interpretation (Decrop, 2006). Sensation refers to the detection of stimuli by sensory nerves; stimuli are the basic characteristics of the object being perceived, in this case, the visitor attraction and its attributes. Attention has to do with pattern recognition of the sensory input against the knowledge representation in human long-term memory; this is influenced by personal factors such as motives, level of education, level of involvement and quality consciousness; and situational factors like time pressure, position in life cycle and motivation. Interpretation is concerned with sense making. Three main activities are, in turn, pertinent to perceptual interpretation; they are organisation, categorisation and inference.

*2.7.3.1 Quality perception study approaches*

A number of models and theories have been proposed in order to understand consumer perception of quality process. Hansen (2005) identified four predominant approaches employed in the study of consumer food quality perception and these include the economics of information approach, cue utilisation theory, the multi-attribute approach and the hierarchical approach, and means-end chain theory.

*The economics of information approach*

Based on the work of Nelson (1970, 1974 in Hansen, 2005) this approach postulates that the properties of a product can be classified into two main categories: search and experience attributes; an additional term - credence attributes - was introduced by Darby and Karni (1973 in Hansen, 2005). Search attributes represent product properties that can be determined by the consumer before actually buying/consuming the product. Experience attributes are the product properties that can only be perceived and assessed by consumer at the consumption stage.

*The multi-attribute approach*

The multi-attribute approach to evaluation of service quality perception is one of the commonly used in marketing research generally and tourism in particular (see LeBlanc, 1992; Choi and Chu, 1999). In this approach consumer's overall evaluation of quality is based on the summed set of beliefs

held by the consumer that the service possesses certain attributes multiplied by the importance given to these attributes by the consumer.

*Cue utilisation theory*

Bredahl (2003) employed interviews with buyers of branded beef steaks to investigate how consumers use brand information in conjunction with other quality cues to form quality expectations in the shop and how quality is experienced later when the product has been eaten. Findings indicate that the brand serves as a starting point both for expected eating quality and for expected health quality. Bredahl (2003) finds that consumers with low familiarity rely significantly more on the brand as a quality cue, although product familiarity seems to influence the quality perception process overall.

*The hierarchical approach and means-end chain theory*

Garcia and Caro (2007) in their qualitative and empirical study of the travel industry propose a multidimensional and hierarchical model of service quality, based on the work of Dabholkar, Thorpe and Rents (1996) and Brady and Cronin (2001). In the model, like others mentioned in this section, service quality is postulated to be a third-order construct which is composed of several dimensions and sub-dimensions as depicted diagrammatically in Figure 2.3. It was found that customers' perceptions of travel agents' service quality consists of three primary dimensions: personal interaction, physical environment and outcome, which are defined by seven sub-dimensions: conduct, expertise, problem solving, equipment, ambient conditions, waiting time and valence.

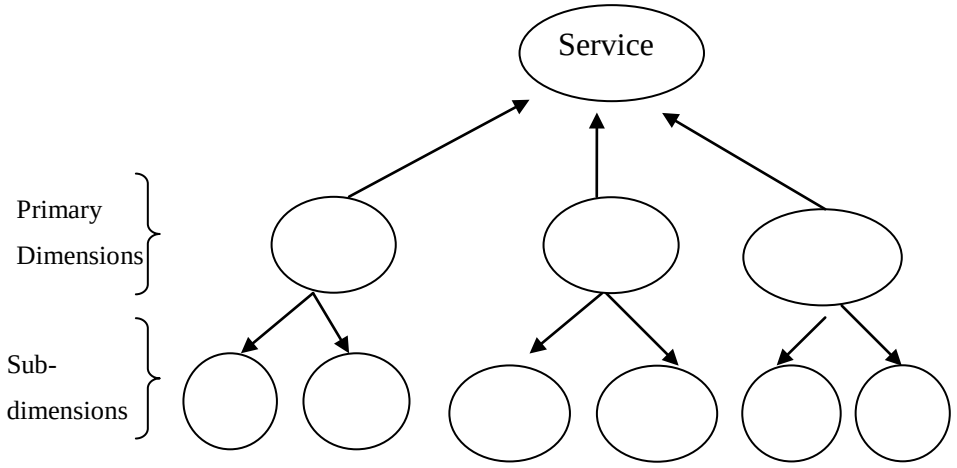


Figure 2.3 The Multilevel Model Source: Dabholkar, *et al.*, 1996

Garcia and Caro (2007) submit that the model has important implications for the measurement of service quality in the travel industry as well as for the development of valid measures of quality performance in the context of services. Brady and Cronin's (2001) and Garcia and Caro's (2007) perspectives have similar basis in terms of multidimensionality and multilevel, they however differ in the assumption of the dimensions as antecedents or components of service quality. Dabholkar, Shepherd and Thorpe (2000) observe that mostly at the initial stage of building a literature stream, constructs are defined in terms of components and as the literature advances, some of the components are regarded as antecedents to provide better understanding of the phenomenon being studied. If Dabholkar, Shepherd and Thorpe's (2000) position were to be true, Brady and Cronin's (2001) perspective is likely to improve the understanding of how service quality perception is formed as claimed by the authors.

*2.7.3.2 Quality perception process*

Steenkamp (1990) applying consumer decision-making concepts to product quality proposed an integrative model of quality perceptions process; and identified a number of factors to be considered within the process (Figure 2.4). The factors include cues in the environment consisting of intrinsic and extrinsic quality cues; quality attributes which are divided into two broad classes – experience and credence attributes. Other factors considered by Steenkamp (1990) include personal and situational factors with cue acquisition and categorisation, quality attribute belief formation and quality attribute integration as the underlying stages of quality perception formation process.

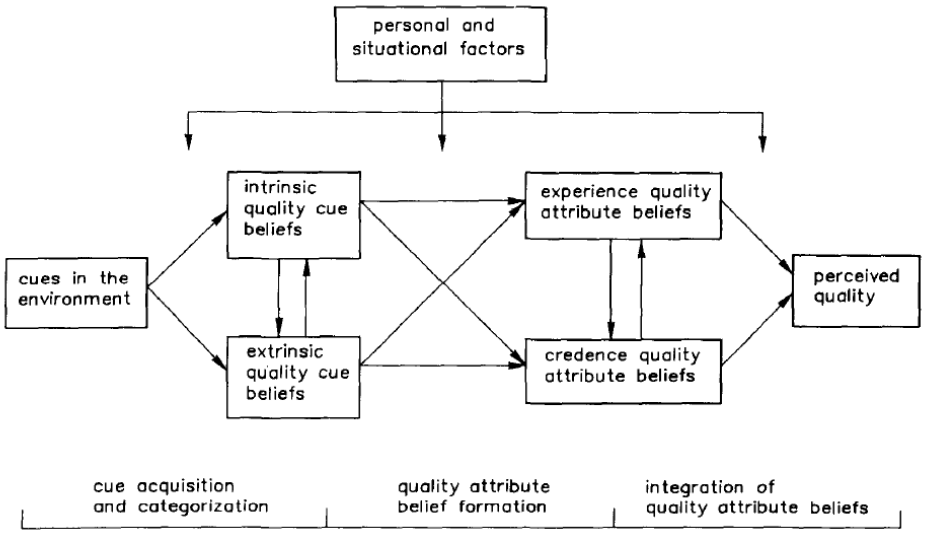


Figure 2.4 Quality Perception Process Model Source: Steenkamp, 1990

The model emphasizes descriptive and informational quality attribute belief formation and highlights the distinction between intrinsic and extrinsic quality cues, and between experience and credence quality attributes. Whilst the concepts and ideas propounded by the model are formulated on product quality premise, most of these are applicable to service context (Steenkamp, 1990).

## 2.8 Attraction quality attributes

Milman (2009) submits that attributes used in evaluating attraction products emphasise both tangible and intangible aspects of the product and may include variables such as product appearance, aesthetics, visiting time constraints, the cultural framework of the story presented by the attraction, technological capabilities and visitors' state of mind before, during and after visiting the attraction. Milman (2009) however contends that there is limited literature on the theoretical background used to develop tourism and hospitality evaluation and rating criteria and concludes that evaluation criteria used in the field appear to rely on previous research and methodologies relating to product image and visitor satisfaction.

In the literature, attributes used in evaluating visitor attractions have been grouped under varying quality dimensions/categories and/or sub-dimensions/sub-categories. Notable amongst these categorisation are: quality of performance and quality of experience (Cole *et al.*, 2002); responsiveness, tangibles, communications, consumables and empathy (Frochot, 2004); product, experience, marketing, culture and leadership (McKercher *et al.*, 2004); surroundings of the attraction, reception/ticket office, literature and souvenir selling area, exhibition, catering, toilets, general impression (Nowacki, 2005); core, tangible and augmented (Mehmetoglu and Abelsen, 2005).

Crompton (2003) adopted Herzberg's two-factor theory to classify quality attribute in an events context. However, Crompton's (2003) investigation proved problematic as the concepts in the model were not clearly delineated. Mehmetoglu and Abelsen's (2005) categorisation was based on Kotler's (1994, 1997) product levels conceptualisation and subsequently Swarbrooke's (2002) attraction product model. Many models and theoretical ideas have been employed in formulating attraction attributes and these have given rise to a wide range of factors for evaluating attraction quality. The following sections present a discussion of the most relevant attributes.

***Physical environment***

Wall and Berry (2007) highlight that research in environmental psychology draws from the stimulus-organism-response (SOR) paradigm in psychology and generally indicates that the physical environment can powerfully affect customers' cognition, emotions, and behaviour. One important factor that has been thoroughly emphasised in attractions research is the physical environment. Exploration and browsing of the environment are essential part of an attraction product and these make the physical environment more central in this context. The physical environment has a broad meaning and can encompass features and attributes such as equipment, ambience, site layout, scenery, site appearance, and general site and facilities' cleanliness.

A significant number of studies have linked atmospheric elements to specific consumer behaviour (Bitner, 1990; Baker *et al.* 1994; Bonn *et al.*, 2007). Baker *et al.* (1994) in a study examining how the physical environment influences

perceptions of quality and store image, found that ambient elements of the store environment provide information that consumers use to evaluate quality. Bitner (1990) contends that the physical environment can have a significant influence on perceptions of the overall quality of the service encounter. Obermiller and Bitner (1984 in Bonn *et al.*, 2007) pointed out that when visitors are drawn to the attraction's environment, the experience can bring about positive evaluations of the exhibits and eventually lead to positive attitudes to the site and/or greater likelihood of repeat visit and recommendation.

Cleanliness of the attraction site and facilities is an important attribute that is closely linked to the physical environment. Bitner (1990), in a travel agency context, found that customers were less likely to associate service failures to the companies when employees had clean, organized desks. Atkinson (1988), in the hotel sector, found cleanliness to be the top rated attribute among 57 hotel features. Also Gustin and Weaver (1993) in a study of attributes used by mature travelers in selecting and/or judging hotel quality found that respondents rated cleanliness highest among many other attributes. Thach and Axinn (1994) found cleanliness and the presence of nice scenery foremost amongst core conditions that influence the perception of theme park visitors.

***Education, entertainment and interaction***

Most attractions, such as museums, historic houses and gardens, are known for their role in providing education and entertainment within the theme of history and heritage, particularly art. Education and entertainment have become so

important in the attraction sector to the extent that the term edutainment, derived from the fusion of education and entertainment, has been widely deployed in tourism and related industry; and subsequently formerly distinct sectors are becoming increasingly similar (Hertzman *et al*, 2008). McKercher *et al.* (2004), in cultural attractions context, found that attractions that have entertaining as well as educational components to their offerings have proved to be more popular than those that stress educational outcome alone. In another context, Baker and Crompton (2000) found the entertainment component has a much stronger linkage with quality than many other attributes such as information and comfort amenity. Thach and Axinn (1994), in their examination of the US attraction sector, found that those who had visited a variety of parks have a tendency to rate entertainment components such as comedy shows, music shows, animal shows, and general entertainment highly; and their study equally suggests that these attributes appeal to the more sophisticated visitor. Milman (2009) also points out that in evaluating theme parks, visitors attributed a higher level of importance to memorable sensations associated with entertainment.

Milman (2009) contends that the meaning of mechanical rides has been replaced by a postmodern interactive experience involving all five senses. This is also true about other attractions, such as science museums and art galleries, where interactive, educational and entertainment elements of the attraction product have been emphasised.

***Interpretation and use of technology***

Interpretation unequivocally has been a long standing practice in museums art galleries and other types of attraction. Interpretation plays vital roles in visitor attraction operations. On the one hand, it helps in the creation and enhancement of visitor experience. On other hand, it is an important mechanism in supporting the sustainability of the attraction (Moscardo and Ballantyne, 2008). Many of the activities and services offered by attraction operators are one form of interpretation or the other. Activities such as guided tours, information signs and guide books are traditional means utilised in the attraction sector including museums and art galleries. Modern and contemporary approaches however have been adopted and are gaining ground even amongst attractions, such as theme parks, which traditionally would not have thought of interpretation in the past. Martin and Mason (1993) point out that new techniques of interpretation offer a key opportunity for all types of visitor attractions to improve their offer to the target market. A key driver in this area is the use of technology. Many attractions including the Blists Hill Victorian Town have used technology in inspiring and innovative ways relating to the activities and exhibits generated, so that the technology has become an attraction in its own right.

Proctor and Tellis (2003) investigated the rapidly changing use of technology in museums using the Tate Modern Museum as a case study; the study revealed that wireless interactive systems are important tools and offer unique opportunities for the development of in-gallery interpretation and education programmes. The study concluded that the visitor response to the Tate Modern Multimedia Tour Pilot gave a clear and positive indication of the future of the

use of technology, particularly handheld devices, in the museum sector. The Tate Modern Multimedia Tour is specially designed for children. The content of the multimedia tour is delivered to the visitor on handheld computers through the museum's wireless network. The idea is for visitors to experience audio, video, still images and a variety of interactive applications; the tour is available in five European languages including English.

Reid and Sandler (1992) pointed out that organisations embark on technological innovations on the one hand to save money and on the other hand largely to benefit customers, by raising the general level of quality and service delivery. However, Benchendorff *et al* (2005) note that little attention has been given to tourists' perceptions of, and interest in, the use of technology in creating and enhancing the visitor experience. Benchendorff *et al* (2006), in an examination of four groups of tourists based on visitor preferences for technology use in tourist attractions and technology experience, found an interaction between technology preference and experience type, especially for high-tech attraction experiences.

***Fun and fantasy***

The fun and fantasy attribute is the core of theme parks, although it is not limited to the theme park sector as other types of attraction are incorporating fun and fantasy concept. Walter (1991: 133) postulated a view on the social meaning of fun as an experiential process within leisure involving “an active social structuring in direct face-to-face interaction, wherein the individual is externally . . . engaged to create a social-human bond” with others. The historic

development of the theme park is associated with the metamorphosis of amusement parks and fairgrounds into fantasy-provoking atmosphere. Theme parks in themselves are superior to fairground and amusement parks in their use of technology and better consideration for health and safety, which are particularly enforced by law. Most attractions are not only creating fantasy but are also incorporating education and entertainment to offer visitors an experience of the future. Wanhill (2008b) argues that the underlying principle of the attraction product, particularly theme park, is the provision of a pleasurable day out for the visitor.

The secret to a successful fun and fantasy attraction product is a clear product concept vividly communicated to visitors. A complex concept or a mixture of uncomplimentary ideas will likely achieve little success in stimulating emotional experiences required to attract the targeted group and subsequent repeat visit. Visitors buy clear concepts not just a bundle of elements that make up the product or even the benefit thereof (Johnston and Clark, 2005). Another important influencing factor to the success of the theme park product is 'reproductive' imagescapes (Wanhill, 2008b), which evoke popular products and events in the mind of potential and existing visitors.

Milman's (2001) study of 122 North American theme parks' general managers revealed that consumers would most possibly demand and consume interactive adventure, fantasy and mystery, movies and television shows, and science fiction/futuristic themes. Geissler and Rusks (2011b) found that the principal

factor that visitors use in evaluating a theme park is the ‘overall experience and value’.

***Transport, parking and accessibility***

There is a growing theoretical and managerial focus on the role of transport and access both in tourism, generally, and visitor attractions, in particular. Swabrooke (2002) listed a number of relationships between attractions and the transport system:

- Physical accessibility of attractions via transport networks;
- Development of new public transport services as a result of the existence of a major attraction;
- Intra destination transport service to facilitate travel between attractions and other destination facilities;
- Novel methods of on-site transport used in moving visitors around within an attraction;
- Mode of transport as an attraction in its own right.

Often when the issue of tourism and transport is raised, it is the physical accessibility of a destination (attraction in the case of this study) that comes to mind. Advancement in transportation technology has reduced the cost, time and risk involved in travel. Even then, some attractions are not easily accessible because of their location. Prideaux (2002), in a study examining the issues that affect the operation of visitor attractions in peripheral areas, found location and access as the key factors for success; it was noted that as the

isolation factor increases, the scale of the attraction must increase as must its uniqueness if it is to succeed.

According to Garrod *et al.* (2002), the vast majority of visitors get to UK visitor attractions by car or coach. Dickinson *et al.* (2004) also note that people on day trips travel further compared to those on holiday; and holiday visitors having travelled to a destination are likely to experience travel inertia. Where an attraction organisation does not have adequate parking facilities, particularly on-site, traffic-related problems often ensue and this is most likely to impact on visitors' perceptions of attraction providers' performance and visitor satisfaction.

Thompson and Schofield (2007), in an investigation of the relationship between public transport performance and destination satisfaction, note that local transport at tourist destinations exercises an influence on visitor experience, overall satisfaction and repeat visitation. It was found that the dimensions of urban public transport performance used by visitors to evaluate quality comprise of 'ease of use', 'good parking' and 'efficiency and safety'. It was established that the influence of public transport's 'ease of use' on destination satisfaction is greater than the influence of 'efficiency and safety' however, perceived performance of the public transport system has only a minor influence on destination satisfaction.

Transport, in some cases, can be seen as an attraction product. Hall (2005) shed more light on the transport-attraction product by putting the experiences in

three categories namely: unique transport experiences, added-value experience with transport services and the intrinsic attraction of transport itself. The unique transport experiences are based on the nature of the transport and the geographical setting in which the transport exists or operates. An example of this type of experience can be acquired in the monorail at Alton Towers or the Narrow Gauge Mine Railway at the Blists Hill Victorian Town. Visitors to the latter can ride a short distance through the woods on the narrow gauge railway into the Clay Mine to relive Victorian mining experience. Hall (2005) added that the use of transport on attraction sites in this manner may intend to be, or have become, a major recreational activity or experience rather than a means of getting from one point to another with the attraction. As such, it adds to the range of things to see and do.

Another attraction attribute that has featured prominently in the literature in one form or the other is access for physically challenged. Swarbrooke (2001) notes that considerable success has been recorded in this aspect, especially by attraction establishments developed with government or European Commission funding, publicly owned attractions which want to facilitate access to all groups within the community on whose behalf they operate, and large attractions owned and operated by companies with the financial resources to invest in the required facilities. A number of writers (e.g. Swarbrooke, 2001; Goodall, 2006; Hassan and Iankova, 2012) have cited accessibility and provision of facilities for physically challenged to be a dominant and compelling issue in attraction management and attraction quality. However,

Nowacki (2005) reported that the sampled visitors in his museum study did not assign high priority to this attribute.

Swarbrooke (2001) however prefers the use of the broader term ‘special need’ which will encompass a range of users including visitors with language/interpreter service requirement, parents with babies who need changing and feeding facilities, and visitors with special diets. This diverse range of visitors has differing needs that require a variety of facilities in order to provide them with satisfying experiences.

Law (1998) noted that some attractions, particularly historic buildings, are idiosyncratic in their internal configuration; and this condition poses a range of challenges to managers in the industry vis-à-vis visitor traffic (both human and vehicular) management. A variety of methods can be employed to control a crowd; these include:

- Zoning;
- Route mapping;
- Trip planning;
- Colour coding;
- Redistribution/channelling;
- The use of escalator or other technology assisted devices.

***Ease of use of facilities***

Moutinho (1988) submits that the market wants easy access in addition to other attraction features and attributes such as fun rides, little waiting in queues and good weather. Sufficient information and functional direction signs will facilitate ease of use of facilities and navigation within an attraction site particularly an open air site such as Blists Hill Victorian Town. Nowacki (2009) notes that sources of information including information boards, panels and orientation signs was one of the factors that strongly influence the perception of service provider performance. Customers often, when deciding between alternatives service options, consider the efforts to be expended in consuming a given service to be quite important (Langeard *et al.,* 1981).

Overcrowding/excessive capacity is an operational issue that is common in attractions, particularly during peak periods. This has a great bearing on visitor perceptions of quality and the visit experience in general, especially if it affects ease of use of facilities or getting around. Overcrowding can happen at the general site level or at individual ride/exhibit/service level.

***Amenities***

Attractions exist in varying type and form, ranging from small-scale locally based and owned properties to large well-known attractions that are the integral bases of a given destination's tourism product. The attraction product can be based on and developed around wide ranging themes - museum, archaeological sites, country parks, historic gardens, nature reserve, historic houses and heritage theme park. The facilities that are available in a given attraction will

depend on the type of attraction, the target market, location and a host of other factors. For instance, a large multipurpose, centrally located theme park such as Alton Towers, Drayton Manor and Florida theme park may feature a water activity-based attraction, an entertainment arena, a sport-based attraction and a hotel; this range of activities will require complementary facilities.

Nowacki (2005), in a museum context utilising the SERVQUAL model, found in the exploration of the responses to the individual items on the measuring scales, that visitors' second highest expectations related to toilet facilities which, in some studies (e.g. Lewis, 1987; Crompton and Love, 1995, Baker and Crompton, 2000), are considered as basic or subsidiary. O'Neill *et al.*, (1999), in an outdoor events context, contend that some features such as toilet and parking facilities may be considered basic conceptually but are essential in visitors' overall assessment. Hassan and Iankova (2012) conclude that the management of facilities at heritage sites and other types of visitor attractions, requires consistent focus on tourist flows vis-à-vis the prerequisite attraction features necessary for offering a satisfactory tourist experience. According to Hassan and Iankova (2012), visitors are able to evaluate their prior perceptions, based on their visit experience of the quality of the existing facilities, their management and related issues, and this has a strong link with recommendation and repeat visitations.

***Retail***

According to Timothy (2005), shopping is one of the most common and enjoyable activities that visitors embark on when on holiday or on a day out,

hence it provides fundamental motivation for travel and can be a key attraction. Nowadays, a number of attraction products are developed by combining visitor services and retailing. Retail outlets are frequently opened on attraction sites as retail activities can be a vital generator of revenue. Furthermore, the sale of goods produced on-site, especially in farm-based or work-place attraction, supports the development of larger export markets as visitors develop a preference for these products and introduce them to friends and family at home (Cox and Fox, 1991).

In some cases, the retail attraction is a distinct unit consisting of a collection of medium to large sized stores/shops. A very good example is the Trentham Estate shopping village with timber lodges housing a wide range of shops from cafes to outdoor pursuit equipment and clothing outlets. Others may be a small unit on a self-contained site, for instance souvenir stores in theme parks, zoo and natural/archaeological sites. Outlets such as gift shops, restaurants or snack bars occasionally support tours or other on-site activities that are offered as complimentary service to attract visitors (Cox and Fox, 1991).

Moscardo (2004) notes that one of the themes in academic literature on tourist shopping focuses on understanding satisfaction and elements of service quality associated with shopping experiences. Reisinger and Turner (2002), in an examination of shopping satisfaction of souvenir product attributes, found strong statistical evidence that tourist satisfaction emanates from specific souvenir product attributes: value, display and uniqueness.

***Food and drink***

A number of destinations have used food as an avenue of increasing tourist numbers (Kivela and Crotts, 2006), and food and food-related components have therefore become an important type of tourist attraction (Quan and Wang, 2004; Lin and Chen, 2012). Depending on the circumstances, food and beverage consumption in tourism can be either the ultimate touristic experience or the secondary consumer experience, (Quan and Wang, 2004). Apart from food and beverage being attractions in their own right, they are the core part of the visitor attraction product. Geissler and Rucks (2011a) contend that a variety of food and food service attributes, such as food quality and value, can either enhance or diminish the overall visitors' experience. In visitor attractions, food offerings can range from quick snacks to a full set menu in an exclusive dining setting. Beverages offered in attraction settings can also range from basic soft drinks to premium beverages sold in upscale lounges/bars.

Findings of previous research on food and drink in the attractions context are quite varied and interesting. Nowacki (2005), in an evaluation of a museum using the SERVQUAL model, found that visitors' highest expectations concerned food service, which in many studies is considered to have secondary importance. Geissler and Rusks (2011b) found that theme park food, value and variety were rated as highly important to visitors and therefore concluded that food and beverage is clearly an integral part of the park experience.

***Management of queues***

In any operation where capacity is surpassed by demand, waiting is the outcome. By the nature of attraction operation, waiting in line is somehow inevitable; however, the length and duration of the queue will be dependent on a range of factors such as time of the day/year, type of operation, service type and a host of capacity related factors. Again, the outcome of the visitor experience will depend on the way in which the waiting is managed. The relationship between capacity utilisation and waiting time is well documented both in tourism in general and in attractions operations in particular (e.g. Dawes and Rowley, 1996; Pearce, 2002). Waiting in line can be controlled by two main techniques: operations management and perception management. The role of managers in managing queues is concerned with the trade-off: the cost of providing quality service versus the cost of visitors waiting in line.

There is a range of views on the impact of waiting times on visitors' perceptions of quality and satisfaction. Pearce (2002) argues that queues stimulate a loss of personal control and an exaggeration of time spent in waiting as well as boredom and physical distress for many visitors. Whilst, it is logical to conclude that a long wait will result in negative perceptions of service, physical discomfort and visitor dissatisfaction, evidence suggests that this might not be universally applicable in all service contexts (Ahmadi, 1997).

Owing to the fuzziness over the relationship between waiting times and visitor perceptions of quality and satisfaction, it becomes imperative that managers clearly understand the mechanism of queuing. One of the key concepts that

helps in shedding light on understanding queuing and its management is queuing theory. Slack, Chamber and Johnston (2007: 346) define queuing theory as "a mathematical approach that models random arrival and processing activities in order to predict the behaviour of queuing system". Where capacity has been exceeded as a result of excess demand, mathematical models assist in predicting a range of measures a propos the nature of waiting times.

A queuing system consists of 'channels' and 'phases'. The channels signify the ticket sale points and phases symbolise the number of service points where the visitors in line will stop. An attraction layout could be a single line channel or a multiline channel. A single line channel queuing system stands for one ticket selling point and a single queue whereas a multichannel queuing system will have more than one ticket selling point with one or more lines depending on the configuration of the queuing system and site layout. Whichever queuing system an attraction organisation chooses will be determined by the operation's size and nature. It is not uncommon that visitors to some attractions may not need to queue to buy tickets, as such tickets might have been obtained on the internet via the organisation's website or vendor, but they may still have to follow a line to enter the site.

In managing queues Drews and Rowley (1996) point out that there are two interlinked issues that managers need to be conversant with: minimisation of the waiting time and, when waiting is unavoidable, the optimisation of the waiting experience. Optimal waiting time may vary from service provider to service provider and from one individual visitor circumstance to another.

There is no doubt that an excessive wait in a queue can be boring and annoying. Pearce (2002) suggests that better management of queues may include incorporating new queue shapes and forms, involving in-queue mental activities, physical incorporation of the queue into the exhibit space, and for the longer queues, greater attention to physical comfort and service facilities. Established and experienced attraction organisations have studied their operations and are able to determine when human traffic will build up and put in place measures to prevent unnecessary and boring queues. It is a common practice in the attraction industry for organisations to engage visitors while waiting in line. This can be done by creating focal points or activities as suggested by Pearce (2002) to reduce their sense and feeling of waiting for too long; in this case queuing itself will become part of the attraction experience. It would be justifiable to submit that the visitors and the activities they take part in when on the queue form part of the system and constitute part of the service experience (Dawes and Rowley, 1996).

***Duration of activities***

Reynolds and Braithwaite's (2001) research on perceived quality in a wildlife tourism context found that the duration of the visitor experience is important. Duration denotes the length of exposure to a given activity; up to a certain point, the experience is heightened and beyond this point the visitor is saturated with the particular experience. Kemperman *et al* (2003), using a conjoint choice approach, explored the duration aspect of theme park visitors' choice behaviour. Understandably, visitors to theme parks will most likely try to

optimise their experience in the park by spending time on specific rides/activities within the park.

Kemperman *et al* (2003) submit that the waiting time, activity duration, location of ride/activity and visitor and context characteristics will influence the time visitors want to spend at a given activity. Nowacki (2008) corroborates this by indicating that attractions with varied exhibition elements can keep the visitors interested in their contents for a longer period of time. Wall and Berry (2007) point out that the more time customers spend in a service facility, the greater the opportunity they have to be influenced by mechanical clues.

***Staff***

The link between service personnel attributes and quality service delivery has been well explored in the services management and tourism literature (Hickman and Mayer, 2003; Berry and Bendapudi, 2003; Wall and Berry, 2007; Caro and Garcia, 2008). In most services, the evaluation of the quality of service received by customers and/or the performance of the service provider takes place during and/or after the delivery process where the customer might have encountered the service provider.

Service personnel's attitude and disposition are often emphasised in the service encounter. These form part of Gronroos' (1984) functional quality dimension i.e. 'how' the service is performed. According to Berry and Bendapudi (2003) employees' behaviour in the course of a service presents strong clues that

influence customers' perceptions of service quality. Wall and Berry (2007), in a hospitality context, class these as humanic clues, which consist of the behaviour of service employees, including body language, tone of voice, staff friendliness, sincerity in greeting and level of staff willingness to help guests.

Personal attributes of service staff are a key feature in the delivery of quality service (Gronroos, 1984; Parasuraman *et al*., 1985; Nickson *et al*., 2005). A number of researchers (e.g. LeBlanc, 1992; Wall and Berry, 2007) have indicated that 'personal interaction' is an important factor in the delivery of services and most likely to have the most significant effect on service quality perceptions. 'Personal interaction' denotes the customers' subjective perception of how the service is delivered during the service encounter; it refers to the interaction between the service provider and customer (Caro and Garcia, 2008). According to Caro and Garcia (2008) it consists of conduct (attitude and behaviour), expertise (the degree of knowledge of an organisation's product/services by an employee) and problem solving (ability to handle difficult situations and complaints).

Table 2.2 shows a range of previous studies and various attributes used by visitors in evaluating attraction quality.

Table 2.2 Attraction Attributes used in previous studies

| Author | Context | Attributes of attraction |
|---|---|---|
| Moutinho (1986) | Amusement park | Proximity, hour of operation, transport available, fun rides, educational value, rides (pass card) overall price, live entertainment/show, little waiting, parks advertisement, family atmosphere, , tour package, children's preference/playgrounds, park prestige/image/fame, good restaurants, curiosity, sightseeing, good shops, good climate/scenery/environment, family/friend's influence, fantasy/adventure atmosphere, nearby hotel |
| Cole *et al* (2002) | Wildlife refuge | Quality of performance – Education and conservation, staff/volunteers, comfort amenities, cleanliness, information<br>Quality of experience – Achievement, introspection/nostalgia, physical fitness, escape, new people, nature appreciation/learning |
| Brown (2002) | Horse-related attraction | Comfort/relaxation – Pleasant attitudes of the local people, restful and relaxing atmosphere, availability of suitable accommodation, easy access to the area, variety and quality of recreational facilities, variety and quality of attractions<br>Outdoor/sporting – Festival, availability of entertainment (nightlife), cultural interests, availability of facilities for golfing and other sports activities<br>Historic – Scenic beauty, historical interest |
| McKercher *et al* (2004) | Cultural attraction | Product – Site, setting, scale, access, purpose built or extant facility, complementary adaptive re-use,<br>Experiential - Uniqueness, relevance to tourist, ease of consumption, focus on edutainment,<br>Marketing – Position, does the asset have tourism potential, identification of variable market segment, place in attraction hierarchy, product life cycle and ability to rejuvenate product life cycle,<br>Cultural – Local vs international social values,<br>Leadership – Attitude to tourism, vision, ability to assess tourism potential realistically, ability to adopt a marketing management philosophy to the management of the asset |

| | | |
|---|---|---|
| Frochot (2004) | Historic houses | Responsiveness – Staff are always helpful and courteous, staff are willing to take time with visitors, visitors are made to feel welcome, level of crowding is tolerable, staff are well informed to answer customers' request, visitors feel free to explore – there are no restriction to access, the property and grounds are opened at convenient hours, staff are always available when needed<br>Tangibles – The property is well kept and restored, the general cleanliness and upkeep of the property and grounds are satisfying, the grounds are attractive, the site has remained authentic, direction signs to show around the property and grounds are clear and helpful, the garden and/or park contain a large variety of plants, the interior of the house offers a lot of interesting things to look at<br>Communications – The written leaflets provide enough information, the information on the property and grounds is detailed enough, visitors are well informed of the different facilities and attraction available at the property, foreign language leaflets are helpful<br>Consumables – The restaurant offers a wide range of dishes and refreshments, the shop offers a large variety of goods, the restaurant staff provide efficient service<br>Empathy – The property considers the needs of less able visitors, facilities for children are provided |
| Mehmetoglu and Abelsen (2005) | Heritage museum | Core product – Learning, status of the attraction, novelty<br>Tangible product – Openness of staff, politeness of staff, problem-solving ability of staff, staff's ability to supply quick service, language ability of staff,<br>Augmented product – Variety of choice in souvenir store, placement and forming of souvenir store, availability and quality of food and beverage, cleanliness and hygiene, architecture, visual image and picture, information, parking, opening time |
| Mowacki (2005) | Museum | External appearance of the buildings, suitable car park, easy access for the elderly and disable, friendly and sensitive personnel, |

| | | |
|---|---|---|
| | | ticket office personnel supplies detail information, clear poster with individual tourist attraction elements marked, accessibility of specific information on the on the tourist attraction, accessibility of clear maps of the attraction and vicinity, computerised system of tourist information, warning of possible problems and potential danger, accessibility of information about forbidden and limited behaviour, interesting and high quality choice: literature and souvenirs, reasonable priced items, presentation of products, interestingly arranged and attractive exhibition, exhibition presenting a given problem or a series of ideas in a logical order, exhibition presenting natural environment issues, exhibition presenting historical events or the history of the building/vicinity, exhibition personnel providing competent information, exhibition focusing on the important and unique quality of the building/vicinity, exhibition providing interesting information for children, exhibition stimulating discussion with family and friends, exhibition aesthetics, sign facilitating orientation and movement, using appropriate means for information transfer, clarity of exhibitions – clear and complementary descriptions, personnel appearance, décor in catering facility, suitable menu, aesthetics of food service, cleanliness and freshness, proper toilet, cleanliness of toilets, attraction encouraging visits to the vicinity, attraction arrangement which allows its appreciation. |
| Gonzalez *et al* (2007) | Spa | Well situated, modern spa equipment, simple welcoming décor, comfortable rooms, existence of parking facility, well turned out staff, employees know how to attend customer, high quality food and drink, excellent cleanliness and hygiene installations, beautiful natural surroundings, the staff treat you in a warm and friendly way, individual attention to customers, totally guaranteed bookings, competitive prices, good reputation among general public, facilities for access to complementary activities, peaceful location, absence of mistakes in the performance of the service, the staff take trouble to solve customers' problems, permanent medical |

| | | |
|---|---|---|
| | | assistance, minero-medicinal water of good quality and in perfect condition, wide variety of treatments |
| Milman (2009) | Theme parks | Ride safety, cleanliness of the park or attraction, quality of rides or attractions, friendly and courteous staff, staff's knowledge about the park's features, security, overall perceived value for money, line management for rides and attractions, quality of food, overall number of attractions in the park, value for money for the food purchased, creativity exhibited in the park or attraction, availability of activities for all weather conditions, opportunity to escape from everyday life, price of admission, quality of entertainment and shows, rides or activities that appeal to people of all ages, variety of food prices, layout of the park, appropriate display of show and entertainment times and location, rides or activities that appeal to mainly adults, availability of stage revues, number of thrill rides in the park, rides or activities that appeal to families, price of merchandise, quality of landscaping, number of entertainment options offered to guest, level of theming of the park's attractions and rides, variety of entertainment options, availability of fireworks, number of street food vendors, number of sit-down restaurants, rides and activities that appeal mainly to children, variety of merchandise, variety of food, multilingual staff, variety of shopping options, number of shopping facilities, level of educational experience, availability of street performers, availability of parades |
| Rivera *et al* (2009) | Religious theme site | Information about the Bible, cleanliness, exhibits, physical layout of the facilities, price of food, opportunity to get involved, gift and souvenir, representation of my heritage, inspirational experience, interaction with personnel, price of admission, range of other activities, restaurant facilities, something for everybody, spiritual activities, the use of technology, Christian theme, ease of access/transportation |

## 2.9 Visitor satisfaction

Ensuring and achieving visitor satisfaction is often the main goal of most service providers as this is viewed as a vehicle to improved profit. Heskett *et al* (1997) submit that increased customer satisfaction results in retention and positive word-of-mouth, which subsequently lower marketing costs and increase profit. To this end, the study of satisfaction becomes crucial to attraction managers and researchers alike. The satisfaction construct has drawn the attention of academics to the extent that definitions have proliferated.

Satisfaction describes a visitor's experiences, which are the end state of a psychological process (Lee *et al*., 2007). Traditionally, the consumer is seen as a rational, information processing being. However, the findings of past research have established that satisfaction has as much affective elements as cognitive underpinning (see Fournier and Mick, 1999; Bigne *et al.*, 2005 and del Bosque and Martin, 2008). A more affective-encompassing definition put forward by Oliver (1997: 13) states that:

> "satisfaction is the consumer's fulfilment response. It is a judgement that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under or over fulfilment".

Eggert and Ulaga (2002) note that on the one hand, satisfaction evidently derives from a cognitive process in which performance is compared against some evaluation standard, and on the other hand, it entails feeling which is essentially an affective state of mind.

A large number of studies have been conducted in the area of visitor satisfaction in the tourism and related areas. Researchers have measured visitor satisfaction with dining experiences in restaurants (e.g. Yuksel and Yuksel, 2003). Others have examined tourist satisfaction with package tours (e.g. Bowie and Chang, 2005). Other areas that have been examined in this regard include tourist satisfaction with hotels services (e.g. Choi and Chu, 2000) and travel agencies services (e.g. Millan and Esteban, 2004). In the same vein, the number of empirical studies in visitor satisfaction with destinations and attractions has grown remarkably over the years (see Vitterso *et al.*, 2000; Yu and Goulden, 2006).

It has widely been documented that service experiences influence the stimulation of visitor emotions, and these subsequently affect consumer satisfaction and behavioural intentions. The emotional nature of satisfaction relates to the central tone of consumer satisfaction which may be explicit to cultures, values and metaphors (Fournier and Mick, 1999).

According to Russell and Pratt (1980) emotions have two principal dimensions namely pleasure and arousal. Pleasure is the extent to which a person feels good, joyful or happy in a situation. On the other hand, arousal refers to the extent to which a person feels stimulated and active (Bigne *et al.*, 2005). Bigne and Andreu (2004), in a study of 400 visitors to theme parks and museums, found that the visitors experiencing greater pleasure and arousal showed an increased level of satisfaction and loyalty to the organisation.

It has also been noted that customer satisfaction by its nature has an inherent tendency specific to culture. Kozak's (2001), cross-cultural study of 1872 British and German tourists visiting Mallorca and Turkey in 1998 examined differences in satisfaction based on nationality. He found that British tourists were more likely to be satisfied with almost all individual attributes of a destination than German tourists.

In the same vein, Choi and Chu (2000) in another cross-cultural visitor satisfaction study investigating Asian and Western travellers' perceptions about the service quality of Hong Kong hotels, posit that level of visitors' satisfaction may vary alongside visitors' nationality. The results from the study suggest that Asian travellers' overall satisfaction is primarily derived from perceived value, whereas that of their Western counterparts is more dependent on room quality.

Yuksel and Yuksel (2003) employed a segment-based approach to measure tourist satisfaction with restaurant services and found that different sets of service dimensions seemed to influence satisfaction judgments. Greater disparity in satisfaction was explained when analysis was undertaken at market segment level compared to overall market level. Table 2.3 shows a range of bases upon which satisfaction has been conceptualised.

Table 2.3 Concepts of Satisfaction

| Reference | Definition | Key words | Object |
|---|---|---|---|
| Oliver (1981:27) | Final psychological state resulting from the disconfirmed expectancy related to initial consumer expectations | Evaluation<br>Final psychological state<br>Emotional response | Surprise<br>Disconfirmed expectancy with relation to pre-purchase expectations |
| Swan, Trawick and Carroll (1982:17) | Evaluative or cognitive opinion which analyses whether the product represent a satisfactory or poor result for its end users Emotional response towards product | Evaluative or cognitive opinion<br>Emotional response | Product results |
| Churchill and Surprenant (1982:491) | The conceptual response by the consumer of the purchase and use of a product which comes from the comparison of the rewards and cost of purchase relative to expectations Operatively, similar to an attitude because it can be measured as the total satisfaction from various attributes | Result<br>Attitude | Comparison of cost and rewards of product relative to expectation |
| Labarbera and Mazursky (1983:394) | Subsequent evaluation of purchase Evaluation of surprise derived from the purchase of a product or service | Evaluation | Surprise |
| Cadotte, Woodruff and Jenkins (1987:305) | Impression after the evaluation of use of a product or service | Impression created by evaluation | Use of product or service |
| Tse and | Consumer response to | Response | Perceived |

| | | | |
|---|---|---|---|
| Wilton (1988:204) | the evaluation of the perceived difference between expectations and final result after consumption | made by evaluation | difference between expectations (other measure of results) and the actual result of the product |
| Westbrook and Oliver (1991:84) | Subsequent evaluative opinion of choice relative to specific purchase | Evaluative opinion | Choice of specific purchase |
| Fornell (1992:11) | Overall evaluation after purchase | Overall evaluation | Comparison of the perceived result after purchase with expectations prior to purchase |
| Oliver (1992:242) | The coupling of coexisting attributes to other sensations derived from consumption | Addition of attributes to other sensations derived from consumption | Product attributes |
| Halstead, Hartman and Schmidt (1994:122) | Emotional response associated with a specific transaction resulting from the comparison of the result of the product to some set standard prior to purchase | Emotional response | Product result compared to standard expected prior to purchase |
| Oliver (1996:13) | Judgement of sufficient level of satisfaction offered by a product or service during consumption | Evaluative response of satisfaction level during consumption | Product or service |

Source: Millan and Esteban, 2004

In some cases, satisfaction and quality are conceptualised in the same way and/or used interchangeably in discussions. For instance Yu and Goulden, (2006) operationalised visitor satisfaction as the aggregate of destination or attraction attributes (eg Yu and Goulden, 2006), an approach Vitterso *et al.*,

(2000) called an 'instrumental' perspective. Others have depicted satisfaction as a gap between pre-travel expectations and post-travel experiences (see Moutinho, 1987 and Pizam *et al.*, 1978). In this case, satisfaction is depicted as the outcome of a comparison process between expectations and actual performance (see 2.10.1 for a further discussion on expectancy-performance (dis)confirmation modelling). It is important to note that the two constructs are distinct. Service quality judgement is mainly a cognitive process (Vida and Readon, 2008), satisfaction is the psychological outcome derived from a service experience (Lee *et al.*, 2007). Oliver (1981: 27) defined satisfaction as a "summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience". Satisfaction judgement can result from any dimension, quality related or otherwise, as it encompasses a wide range of factors which may be within or outside the control of a service provider.

Whilst a distinction is made between satisfaction and quality, a number of studies (eg Baker and Crompton, 2000; Brady, Cronin and Brand, 2002; Cole and Illum, 2006) have found a significant relationship between the two constructs, with service quality being predominantly an antecedent of satisfaction. Lee *et al* (2007) submit that service quality is likely to be a major factor in providing satisfaction even though satisfaction is not exclusively achieved through service quality.

Perceived value is another construct that has been found to have a significant relationship with satisfaction, yet the direction of the relationship has induced

noticeable controversy. In spite of the growing body of research in this area, it is still unclear how value interacts with customer satisfaction (Eggert and Ulaga, 2002). It has been contended by some (e.g. Bolton and Drew, 1991) that satisfaction causes value to manifest. Petrick *et* al (2001) argue that value perception is a higher order construct and a more reliable judgement than satisfaction. Hence Gross (1997) called for replacement of satisfaction construct with the value construct as a better predictor of behavioural outcomes in business markets. Conversely, a number of other writers (e.g. Patterson and Spreng, 1997; Cronin *et al.,* 2000; and Brady *et al.,* 2005) favour the value-satisfaction path and argue that satisfaction is more strongly related to behavioural intentions. Eggert and Ulaga, (2002) submit that there are distinct differences between customer satisfaction and customer perceived value (Table 2.6) and that the two constructs rather complement each other.

Table 2.4 Conceptual differences between Satisfaction and Value

| Satisfaction | Perceived value |
|---|---|
| Affective construct | Cognitive construct |
| Post-purchase perspective | Pre-/post-purchase perspective |
| Tactical orientation | Strategic orientation |
| Present customers | Present and potential customer |
| Supplier's offerings | Suppliers and competitors offerings |

Source: Eggert and Ulaga, 2002

The relationship between customer satisfaction and behavioural intentions is less ambiguous. The literature converges on the view that satisfaction is a good predictor of behaviour like loyalty and word-of-mouth recommendation;

although, other constructs can lead direct to either positive or negative behaviour in varying transactional situations.

## 2.10 The measurement of customer satisfaction and perceived service quality

The measurement of perceived quality and satisfaction have been approached in three different ways. First, using an expectation-(dis)confirmation model; second, using a performance-only construct; and thirdly, with an importance-performance approach. The following sub-sections discuss the methods in detail.

### *2.10.1 Expectation-(dis)confirmation model*

A good number of previous studies in service quality and satisfaction were based on the expectancy-(dis)confirmation paradigm, which hypothesizes that consumers evaluate a product or experience by comparing pre-consumption expectations with the perceived performance of the product's attributes. Parasuraman *et al*'s (1985) SERVQUAL is one of the notable research works that employed this technique and which, in turn, has been used broadly in a wide range of services management research including tourism. Nevertheless, it has received substantial theoretical and operational criticism (e.g. Oh, 1999; Hughes, 1991; Getty and Thomson, 1994; Ekinci et al, 2000) despite its popularity in the literature.

Firstly, the use and interpretation of discrepancy scores is open to questioning in so much as it is the researcher who carries out the comparison between

expectations and perceived performance (Oh, 1999). Secondly, the validity of the 'difference' score as an indicator of quality or satisfaction is problematic as visitors may be satisfied or the service perceived as having quality in the face of negative disconfirmation (Hughes, 1991). Thirdly, the timing of expectations measurement can also be problematic (Yuksel and Rimmington, 1998). If expectations are not solicited *a priori*, they are contaminated through experience (Getty and Thomson, 1994; Carman, 1990). Fourthly, it is widely agreed that the conceptualisation of expectations as a benchmark for comparison is inexplicit (Ekinci *et al*, 2000). Expectations may or may not be based on experience (Carman, 1990) and/or could be 'ideal', 'predicted', 'minimum tolerable' or 'deserved' expectations (Miller, 1977) or an amalgam of all or some of these, which will in effect have a bearing on the direction and intensity of the (dis)confirmation.

### *2.10.2 Performance-only model and importance-performance model*

The 'performance-only' approach to service quality and consumer (visitor) satisfaction hypothesises that evaluation of a product (experience) is determined by perception of the performance alone. According to Thompson and Schofield (2007); Cronin and Taylor (1992) and Churchill and Surprenant, (1982), this method is a more effective way of conceptualising quality and/or satisfaction. Performance-only measures are more typical of the cognitive process (Meyer and Westerbarkey, 1996) and it is pivotal in the formation of customer satisfaction and quality because performance is the main feature of the consumption experience (Yuksel and Rimmington, 1998). Moreover,

satisfaction results if a product 'performs' well irrespective of any disconfirmation effect (Mannell, 1989).

A number of studies have weighted service product attribute performance with importance scores to either determine perceived strengths and weaknesses from the consumer perspective (Deng, 2007; Schofield, 2001; Kozak and Nield, 1998) or to compare the validity of the different conceptualisations of quality and satisfaction as derivatives of expectations, importance and performance constructs (Fallon and Schofield, 2004; Yuksel and Rimmington, 1998; Crompton and Love, 1995).

In all cases, the performance-only approach was the most effective measure of quality/satisfaction, the disconfirmation-based models were the least valid and importance-weighting did not improve the predictive power of the measures (Thompson and Schofield, 2007). Despite these findings, widespread support exists for incorporating the importance construct into customer evaluation studies (see for example Deng, 2007; Abalo *et al.*, 2007) because it provides a useful context and diagnostic tool, which yields insights about product attributes from the perspective of different consumers (Litvin and Ling, 2001).

It is important to note that there is a broad distinction between service quality and visitor satisfaction and previous research that employed the same methodology in conceptualising the two constructs have been measuring only service quality and not satisfaction. The performance-only model was adopted

in this research to conceptualise and measure attraction attribute quality because of its superiority as established in the pertinent literature.

### 2.11 Perceived value

In recent years, there has been a renaissance of interest in the value construct among both researchers and practitioners. However, the relationship between value and associated service constructs is still unknown (Egert, 2002). Nonetheless, value is pervasive to marketing theory and consequently to understanding consumer behaviour. Value is crucial in explaining different areas of consumer behaviour such as product choice (Zeithaml, 1988), purchase intention and repeat visitation. Value is a multifaceted and complex construct (Gallarza and Saura, 2006) that varies from one customer to another; culture to culture and one buying episode to another. Value is a subjectively perceived construct (Zeithaml, 1988; Kortge and Okonkwo, 1993). To this extent value is context specific although this realisation did not come automatically as value has been defined and conceptualised variously – using a unidimensional measure (ZeithamI, 1988) and a multidimensional scale (Bolton and Drew, 1991; Sheth, Newman and Gross, 1991; Sweeney and Soutar, 2001; Petrick and Backman, 2002; Sanchez *et al*, 2006). The validity of the one-dimensional measure has been under examination as a result of its assumption that put all consumers in one box in terms of the meaning of value.

Zeithaml (1988: 14) suggests that "perceived value is the customer's overall assessment of the utility of a product based on perceptions of what is received and what is given." Value is considered to guide the retention decisions of

customers (Gassenheimer, Houston, & Davis, 1998 in Chang, 2008). To this end, the conceptualisation of value as a 'benefits-sacrifice' construct appears to be a key factor in determining behavioural intent. Correspondingly, Athanassopoulos (2000 in Chang, 2008) defined customer value as a function of consumer perceptions of service quality. Chang (2008) suggests that service quality type influences customer perceptions of value.

The trade-off models have their origin in the concept of economic utility and focus on the functional attributes of tangible goods. These models have been criticised as being too simplistic in explaining service experiences because they ignore the multi-dimensional nature of the service experience. A multidimensional scale can help to address the issue of validity because value has been viewed (for example by Bolton and Drew, 1991) as a complex construct with traditional functional dimensions like perceived risk, quality, benefits and price, interacting with socio-psychological dimensions such as prestige, novelty and hedonism. Sanchez *et al* (2006) argue that tourism and related activities have to depend on fantasies, feelings and emotions to understand purchase behaviour. Hence broadening the scope of the value measurement will enable aspects other than functional dimensions to be captured.

A number of multi-dimensional models of value have been developed incorporating functional and social-psychological elements. Sheth, Newman and Gross (1991) proposed a five-dimensional construct consisting of social, emotional, functional, epistemic and conditional response. Petrick and

Backman's (2002) SERV-PERVAL scale features slightly different but not exclusive dimensions of quality, monetary price, non-monetary price, reputation and emotional response. Gallarza and Saura (2006) developed an eight-dimension model, based on Holbrook (1994), comprising efficiency, excellence, status, esteem, play, aesthetics, ethics and spirituality. Their result indicated a weak relationship and they accepted difficulty in operationalising some of the categories. Sanchez *et al* (2006) also proposed a tourism context specific multi-dimensional value model – GLOVAL. William and Soutar (2009) note that this study is yet to be replicated. Sweeney and Soutar's (2001) PERVAL model is based on Sheth, Newman and Gross's (1991) model. The PERVAL framework consists of quality/performance, social, price/value for money and emotional dimension. Table 2.5 presents various researchers who have adopted the multidimensional methodology and the corresponding derived value dimensions.

A number of empirical studies (e.g. Duman and Mattila, 2005; Oh, 2000 and Petrick *et al.,* 1999) have indicated that perceived quality and monetary price are the two major antecedents of perceived value in tourism service and, in turn, perceived value is a significant antecedent to visitors' satisfaction and behavioural intention (Cronin, *et al*, 2000; McDougall and Levesque, 2000). However, Petrick et al (2001); Bolton and Drew (1994) and Bolton and Drew (1991) argue that perceived value is a higher order, more stable judgment than equity or satisfaction. According to Oliver (1997) value evaluation takes both cognitive and affective dimensions. Duman and Mattila (2005) however noted that the cognitive perspective of value perception is often more emphasised in

the literature than the affective aspect, this may be as a result of the earlier one-dimensional conceptualisation of the concept.

Table 2.5 Multidimensional Approach to Perceived Value

| Author | Dimensions |
|---|---|
| Sheth *et al* (1991a, b) | • Social value<br>• Emotional value<br>• Functional value<br>• Epistemic value<br>• Conditional value |
| Groth (1995a, b) | • Cognitive: perceived utility<br>• Psychological<br>• Internal<br>• External |
| Gronroos (1997) | • Cognitive<br>• Emotional (psychological) |
| de Ruyter, Wetzels, Lemmink and Mattson (1997) | • Emotional dimension or intrinsic value<br>• Functional dimension or extrinsic value<br>• Logical dimension |
| Sweeney, Soutar and Johnson (1999) | • Social value<br>• Emotional value<br>• Functional value (price/value for money)<br>• Functional value (performance/quality)<br>• Functional value (versatility) |
| Sweeney and Soutar (2001) | • Functional dimension (economic and quality)<br>• Social dimension<br>• Emotional dimension |

Source: Sanchez *et al.,* 2006

Value is independent of timing of consumption; value perception can take place pre, during or post purchase experience. Perception of value can take place without having bought or used a service (Sanchez *et al.,* 2006). Eggert

and Ulaga (2002) contend that value as a construct points at the future in that its strategic orientation aims at assessing how value can be created for customers and how best to meet consumers' needs. Consequently, the evaluation of perceived value is aimed at a cross section of customers including past, current and future customers.

### 2.12 Behavioural intentions

Service providers in tourism and many other sectors are always seeking ways to keep their customers under their roofs as much as attracting new ones. Research has shown that it is more cost effective to retain customers than attract new ones as this has implications for marketing costs, customers' willingness to pay more and subsequently for profits (Chen and Chen, 2009).

Behavioural intention is an indicator that shows whether a customer will remain loyal to a provider or defect to another. According to Armitage and Conner (2001), the intention construct is premised on the theory of reasoned action (TRA) and the theory of planned behaviour (TPB). Intentions are presumed to be the driving factors that influence behaviour and subsequently indicate how truly an individual is willing to try or exert specific amount of effort in performing the behaviour (Ajzen, 1991 in Armitage and Conner, 2001). Fishbein and Manfredo (1992 in Baker and Crompton, 2000) submit that properly measured analogous intentions are capable of accurately predicting most social behaviours.

Behavioural intentions have been measured variously in services marketing and tourism management. The measures obtainable in the literature include: recommending the product to others (Parasuraman *et al.,* 1991); remaining loyal to a provider (Rust and Zahorik, 1993); saying positive things about a service and provider (Boulding *et al.,* 1993); paying a premium price (Alexandris *et al.,* 2002) and spending more on the provider's services (Alexandris *et al.,* 2002). In essence, the elements of behavioural intentions can be grouped into four broad categories – purchase intention, word-of-mouth communication, price sensitivity and complaint behaviour.

Word-of-mouth communication - telling others about the satisfactory/unsatisfactory service received from a provider and purchase intentions has been suggested as vital dimension of the concept of service loyalty (Zeithaml and Bitner, 2000). Chen and Tsai (2007) also allude to this when they state that the degree of loyalty is reflective of a visitor's revisit intentions and willingness to recommend. Loyalty can be assessed by both attitudinal and behavioural measures, where attitudinal measures relate to specific desire to remain in a relationship with a given service provider and behavioural measures refer to actual repeat purchase of a given service offering (Chen and Chen, 2009). Oliver (1999) proposed a framework of loyalty that consists of four elements: cognitive loyalty, affective loyalty, conative loyalty and action loyalty. Cognitive loyalty as operationalised by Bloomer *et al* (1999) depicts the service that first comes to a visitor's mind when making a purchase decision and subsequently the service that is first choice among alternatives. According to Blut *et al* (2007) affective loyalty connotes a

favourable attitude towards a particular brand. As a result of difficulty in measuring action loyalty, researchers result to employing conative loyalty which is the indicator of visitors' willingness to recommend and return to a service provider

Zeithaml, Parasuraman, and Berry (1996) hold the notion that behavioural intention could be favourable where a visitor will engage in saying positive things and recommending a service to families and friends and expressing loyalty to a service provider. Conversely, behavioural intentions could be unfavourable where the visitor is dissatisfied and may result to switching and complaint behaviour. Complaint behaviour has attracted substantial attention in the literature. A number of generalisations obtainable in the literature identified by Richin (1983) are summarised in Table 2.6.

Evidence abounds that behavioural intentions are related to constructs such as perceived quality, perceived value, service benefit, customer satisfaction and service equity. A number of studies within the tourism discipline in particular, and services marketing in general, have investigated the behavioural consequences of such service constructs. For example, Baker and Crompton (2000), employing a structural modelling design in a tourism context, found that service quality dimensions directly and positively relate to purchase intentions, loyalty and willingness to pay more money.

Chen and Chen (2009), in like manner, found evidence that perceived value and satisfaction have a significant, direct positive impact on behavioural

intention; they also found that experience quality has an indirect effect on the same construct mediated by both perceived value and customer satisfaction. Alexandris *et al* (2002) in a hotel industry study of service quality and behavioural intentions also found that the majority of service quality dimension positively and directly influence word-of-mouth communication and purchase intentions. In the same study, they noted that customers were willing to pay more money in order to get better service, although assurance and reliability dimensions only yielded moderate contribution to the prediction.

Table 2.6 Generalisations Regarding Complaint Behaviour

| Generalisation | Author |
|---|---|
| Those who complain when dissatisfied tend to be members of more upscale socioeconomic groups than those who do not complain | Warland, Hermann and Willitts, 1975 |
| Personality characteristics, including dogmatism, locus of control, and self-confidence, are only weakly related to complaint behaviour, if at all | Settle and Golden, 1974; Zaichowsky and Liefeld, 1977 |
| The severity of dissatisfaction or problems caused by the dissatisfaction is positively related to complaint behaviour | Lawther, Krishnan and Valle, 1979; Swan and Longman, 1973 |
| The greater the blame for the dissatisfaction placed on someone other than the one dissatisfied, the greater the likelihood of complaint action | Lawther, Krishnan and Valle, 1979; Valle and Koeske, 1977 |
| The more positive the perception of retailer responsiveness to customer complaints, the greater the likelihood of complaint action | Grabicke, 1980; Granbois, Summers and Frazier, 1977 |

Source: Richin, 1983

## 2.13 Socio-demographic characteristics, consumption and the service constructs

Visitor attractions are found in both urban and rural settings and they constitute the mainstay of the tourism industry; therefore, it can be assumed that a diverse group of people will visit attractions of one shape/form or another and that the visitors' profile will differ from one type of attraction to the other in terms of socioeconomic and demographic characteristics. The use of socio-demographic features is a prevalent and generally accepted basis of segmenting the market (Kotler and Armstrong, 1991). It is imperative that marketers and managers of products, including attraction products, understand the socio-demographic characteristics of their customers in order to judge the market size and spread.

The term socioeconomic status denotes the economic and social position of an individual as revealed by a number of indicators. The commonly used social indicators in services management and tourism studies include level of education and type of occupation. The main economic indicator used in empirical studies is income; and the commonly employed demographic indicators are age, gender, marital status and origin. These are often examined in tourism and related studies to assess consumption patterns and consumer perceptions of products/services. Jansen-Verbeke (1990), in an investigation of socio-demographic effects in a shopping context found attitudes towards shopping, frequency and patterns to be related to visitor characteristics like age, gender, stage in life cycle and social status. Socio-demographic characteristics have also been found to affect visitor perception of quality (Webster, 1989; Iacobucci and Ostrom, 1993; Kelley and Turley, 2001;

Ganesan-Lim, 2008); value (Kumar and Lim, 2008) and satisfaction (Oyewole, 2001; Spinks *et al.,* 2005) and subsequently behavioural intentions.

IPSO MORI's (2001), study, on behalf of, the Council for Museums, Archives and Libraries, investigating overall visitation trends, the core visitor market and the attitudes of visitors towards museums, found that students are the most likely section of the public to visit museums and art galleries (Table 2.7). One third of the people sampled in the 25-64 age range (without children) had visited a museum or art gallery within the study time frame. People age 65 and above accounted for the largest portion of visits followed by people aged 45-64; as such, the museum and art gallery product is heavily dependent on middle aged and senior consumers. The identified managerial implication was the need for museums and art galleries to evolve through audience development and marketing generally.

The stage in family life cycle is another demographic indicator used in empirical studies. The role of children in decision making for the consumption of leisure and related products cannot be over emphasised. Since the theme park product has the family market as its main target, this aspect becomes an imperative one for marketers. McNeal and Mindy (1996), in their study of Chinese family decision making for leisure time, reported that parents acknowledged that the children mostly determine what the entire family does on the weekends, and that families will generally go to places and do things that provide fun for the children.

Table 2.7 Visit to Museums and Galleries – Life Stage

| | % of UK population | % of visitors to museums & galleries | Average frequency of visit per annum | Estimated % of all visit |
|---|---|---|---|---|
| Base: All (4,461) | % | % | % | % |
| Adults 65+ | 19 | 15 | 2.97 | 16 |
| Adults 55-64 | 11 | 14 | 3.10 | 15 |
| Adults 45-54 | 11 | 13 | 3.22 | 14 |
| Adults 25-44 (with children aged 5-10) | 14 | 14 | 2.50 | 13 |
| Adults 25-34 | 9 | 10 | 3.00 | 11 |
| Adults 25-44 (with children 4 or under) | 12 | 9 | 2.55 | 8 |
| Adults 35-44 | 5 | 7 | 3.20 | 7 |
| Young adults 16-24 | 9 | 9 | 2.46 | 7 |
| Adults 25-44 (with children aged 10+) | 8 | 7 | 2.42 | 6 |
| Students | 4 | 6 | 2.49 | 5 |
| Young adults 16-24 (with children) | 7 | 4 | 2.53 | 4 |

Source: MORI, 2001

Spinks *et al's* (2005) research work that investigated the influence of individual visitor characteristics on satisfaction with tourist attractions revealed that significant differences exist between satisfaction levels experienced by visitors of differing origins, genders and age groups. The study also highlights the need for attraction managers to develop strategic marketing mixes for different market segments. Conversely, Reisinger and Turner (2002) found less evidence to suggest that there is a particular need to segment the tourism market demographically in relation to shopping.

Iacobucci and Ostrom (1993) found that customer's gender had some effects on the judgement of core services. Ganesan-Lim *et al* (2008) developed a service–based demographic framework for studying service quality perception based on four service quality dimensions – perceived interaction quality,

physical environment quality, outcome quality and system quality. Contrary to Iacobucci and Ostrom's (1993) conclusion their findings did not reveal any significant effect of gender on any of the four service quality dimensions.

Ganesan-Lim *et al's* (2008) study also indicated that age had a significant effect on perceived interaction quality, physical environment quality, outcome quality and system quality. Mature respondents had significantly higher perceptions of all four service quality dimensions than their younger counterparts. Webster's (1989) study of customer segmentation on the basis of service quality expectations also revealed that age has a significant effect on all service quality dimensions in professional service. The study revealed that in professional service, middle-aged (35-64) respondents placed more importance on reliability, responsiveness, competence and access. However, this category of respondents did not place much importance on credibility and tangibility like older consumers. On the other hand, Webster's (1989) study failed to indicate a significant effect for age on 33 out of 34 quality attributes in a non professional service context, although the results showed a positive relationship between age and perceived importance of nonprofessional service quality.

The effects of the socio-demographic characteristics on the perception of value have also been documented. Kumar and Lim (2008), in a mobile service perception study, found significant differences between Generation Y and the baby boomers in terms of the effect of perceived economic and emotional value on satisfaction. The study further revealed that the effect of emotional value on satisfaction was stronger for Generation Y than baby boomers. In like

manner, economic value had a significant effect on satisfaction for baby boomers whilst this was not the case for Generation Y.

### 2.14 Summary of the review chapter

This chapter has explored the literature and examined issues relating to visitor attraction management and development. It has also delineated the constructs – service quality, perceived value, satisfaction and behavioural intentions. Literature on visitor attraction management and development is also reviewed and attributes used in evaluating visitor attraction quality are identified.

The review revealed the existence of a number of arguments regarding the causal relationship and order of the variables in the service constructs. Many of the constructs have been defined variously, employing a wide range of perspectives. It was also found that appreciable efforts have been expended in investigating these concepts in various areas of tourism and related sectors; however, there is a dearth of empirical research supporting most claims regarding perceived quality and visitor satisfaction in an attractions context.

This chapter has provided the basis for understanding the four service constructs - service quality, perceived value, visitor satisfaction and behavioural intentions as they relate particularly to the attraction sector; the next chapter builds on this foundation and provides an explanation of and justification for the primary research methods employed in this study.

# Chapter Three

# Methodology

## 3.1 Introduction

The previous chapter offered a review of the pertinent literature relating to tourism, visitor attractions management and development, service quality, perceived value, visitor satisfaction and post purchase behavioural intention. This chapter presents the methodology the researcher utilised in achieving the aim and objectives of this study; it also features the justification for the choice of method and discusses its reliability and validity. The term methodology, though distinct, is in some cases used synonymously with method. Methodology denotes the overall approach employed to provide researchers guidelines on how to effectively conduct a study within a given research philosophy (Sarantakos, 1998). Method, on the other hand, is limited to the means of collecting and analysing data (Hussey and Hussey, 1997).

In order to achieve the aim of a study of this magnitude, the researcher must adopt a robust methodology that clearly outlines the theoretical underpinning of the study, justifies the choice of research instrument and explains its design. The justification for and rigorous explanation of the procedure employed in gathering and analysing data must also be provided. Given this, the following sections and sub-sections offer discussion of the theoretical and practical implications of the research philosophy that inform this study; they also review a range of research methods and justify the choice of method that facilitated the data collection and analysis. This chapter also offers explanation of instrument

choice and design and discussion of research strategies employed including sampling. The final part of the chapter discusses the validity and reliability of the research and the method of data analysis.

### 3.2 General framework

Research can be carried out in a number of ways; however, all research follows a similar framework that contains a sequence of activities that are highly interrelated and which together form the research process. Not all research processes follow a stringent sequence; however a common pattern does exist: firstly, the problem is discussed and located within the body of existing knowledge, followed by the research design, sampling, and data collection. After this, data analysis takes place and finally, the summary of findings. This process may follow a cyclical order because iterative steps may be needed to solve certain problems. Also when some studies reach their conclusion they often create new problems and these, in turn, provide the foundation for further enquiries (Veal 2006).

Saunders *et al* (2007) in line with Veal's (2006) view suggest that before carrying out a study, the researcher must decide on an appropriate framework by observing a number of consideration and decisions, which should include the following:

- Reappraisal of the objectives of the research project which consequently assist in choosing suitable paradigm;
- Decisions about methods and techniques to be utilised in data collection and critical examination of methods used in previous studies;

- Identification of constraints of the research project which is likely to help in eliminating less suitable methods and strategies of data collection;
- Decisions about the possibility and viability of adoption of mixed methods in order to obtain superior data set;
- Identification of the limitations of the research design and issues relating to reliability and validity of the design.

The framework above is particularly beneficial as it emphasises the significance of analysing and using previous studies conducted within the subject/topic area as guides. In addition, it accentuates the evaluation of data gathering methods to ensure reliability and validity.

### 3.3 Purpose and type of study

Research involves finding out and explaining the what, how and why of different phenomena employing apposite methods to facilitate the processes that encompass the enquiry (Veal, 2006). There are different types of research projects, depending on the question each proposes to answer as well as its objectives. Saunders *et al* (2007) identify three types of research project based on the research purpose: explanatory, descriptive, and exploratory and submit that the purpose may fall into a solitary category as well as combine two or three categories.

An explanatory study seeks to establish causal relationships between variables (often referred to as constructs in psychology and sociology research, including consumer behaviour). The emphasis is on studying a given problem or situation

so that an explanation of any relationships that exist between variables can be presented. Descriptive research instead seeks to paint an accurate picture of a phenomenon under investigation. According to Saunders *et al* (2007) this type of research can be a forerunner or an extension of exploratory research, which in contrast to the aforementioned two is concerned with examining 'what is happening; to seek new insight; to ask questions and assess phenomena in a new light' (Robson, 2002:59 in Saunders *et al* 2007). Saunders *et al* (2007) pointed out that exploratory study can be conducted employing a search of the literature, interviewing 'experts' in the field and conducting focus group interviews.

This study combines an explanatory and exploratory stance to enquiry. Based on the review of the literature (chapter two), the study has identified a gap in the body of knowledge that needs further investigation. Currently there is a dearth of studies that:

- Explore in-depth service quality and the relationship of service quality, value, customer satisfaction and post purchase behavioural intention in the attraction sector;
- Compare quality dimensions between different types of attractions.

This study addresses these gaps established from the literature by conceptualising service quality and investigating the relationships between service quality and other service constructs at visitor attractions level. Two visitor attractions with different imagescapes were selected for examination – Alton Towers (theme park) and Blists Hill Victorian Town (living museum).

The rationale for the selection of the attractions is presented later in the chapter (see section 3.8.3)

Given this, the purpose of this research is to explore issues in service quality in the UK visitor attractions sector within the proposed framework. The study focuses on understanding how visitors to attractions evaluate quality and it examines the relationship between perceived quality, value, customer satisfaction and behavioural intentions. The following specific objectives are identified:

- Delineate the constructs of perceived quality, value and customer satisfaction and establish how they influence behavioural intentions;
- Determine the factors that contribute to visitors' perception of quality and value;
- Determine the factors that most influence visitors' perception of these constructs;
- Examine the effect of sociodemographic characteristics on the perception of quality;
- Formulate and test a conceptual framework for understanding the relationship between perceived quality, value, customer satisfaction and behavioural intensions at visitor attraction level;
- Compare the differences in perceived quality, value, customer satisfaction and behavioural intensions between visitors at two types of attractions - heritage attractions with enactment and theme parks - using Blists Hill Victorian Town and Alton Towers as case studies.

### 3.4 Conceptual framework and hypotheses

Cronin *et al* (2000) argue that partial examination of the bivariate links between service constructs and behavioural intentions is likely to offer ambiguous representation of their true relationship and that multivariate links, including all relevant variables, are preferable. Despite this realisation, models of the relationship between service constructs and behavioural intentions are often proposed without the inclusion of perceived value (see for instance Zabak *et al.*, 2010). McDougall and Levesque (2000) submit that perceived value has a significant influence on customer satisfaction hence its inclusion will bring about a more comprehensive model of service constructs and behavioural intentions. To this end, this study examines the links between service quality, value, satisfaction and behavioural intention in regard to visitor attractions. It is argued that a concurrent assessment of the driving factors of visitors' behaviour will contribute to theory advancement and strengthen the relevance of research for managers. The following discussion presents how the conceptual model (Figure 3.1) is derived.

The conceptual framework which guided the formulation of this study's hypotheses, illustrated in Figure 3.1, draws from recent and pertinent findings in the services and tourism management literature indicating that quality, perceived value and satisfaction influence visitor behaviour and have direct and indirect relationships with each other (see Baker and Crompton, 2000; Cronin, Brady and Hult, 2000). The framework depicts both the direct and indirect relationships between quality, perceived value, satisfaction and behavioural intentions at visitor attraction, post consumption level. Service quality was

conceptualised as the consequence of attraction attributes performance. The effect of attraction attributes performance on value was also examined and value was operationalised in terms of benefits the visitors obtain from attraction consumption since the concept of benefit would be more practical in generating basic perceive value items (Sweeney and Soutar, 2001).

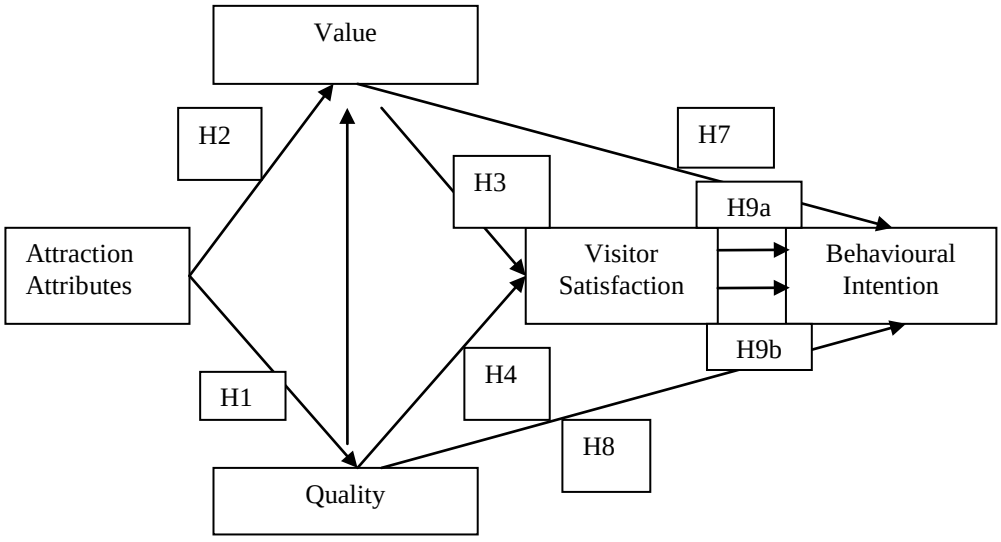


Figure 3.1 A Proposed Model: Relationship between Service Quality, Value, Satisfaction and Behavioural Intentions

### *3.4.1 Hypotheses*

The first hypothesis relates to the performance of quality attributes. Firstly, in the late 1980s and up to the early 1990s, most marketing literature, in general, and leisure related literature, in particular, often operationalise quality as the discrepancy gap between consumer's expectation and perception of performance (after Parasuraman *et al.*, 1988). However, the Parasuraman *et al.* (1988) conceptualisation has been extensively criticised (see sub-section 2.12.1). Subsequently, the criticism inspired proposition that a more valid measure is likely to be achieved by directly assessing perception of

performance of quality attributes. Cole *et al.* (2002) found that visitor perception of attribute performance positively influenced their perception of service quality. Hence, this discussion leads to the first hypothesis:

*H1: Quality is determined by the performance of the attraction attributes.*

Four consequences of value are investigated in this study: attraction attribute performance, perceived quality, visitor satisfaction and behavioural intention. Value is commonly conceptualized as the trade-off between the multiple benefits consumers will receive and the sacrifices they make in acquiring or consuming a product. According to Monroe (1990) perceived benefits are a combination of physical attributes, service attributes and technical support available in relation to a particular use situation. The relationship between attribute performance or level and value is rarely researched in the services context (Patterson and Spreng, 1997).

However, a number of studies have examined the effect of performance of individual attributes on value (see for example Hartline and Jones, 1996; Petterson and Spreng, 1997). Lin (2003) in a product quality study, using a toothbrush as an example to confirm the linkages between a product's attribute levels and the consumer's concept of value found significant relationship between the product attributes and customer perceived value. In a business-to-business, service context, Patterson and Spreng (1997) found all the six performance attributes examined positively related to perceived value. It is

essential to understand if the same condition is applicable to tourism service, particularly visitor attractions.

*H2: Value is determined by the performance of the attraction attributes*

Another contention in services management literature is that value is a more complete antecedent to satisfaction than quality (see McDougall and Levesque, 2000 and Gallarza and Saura, 2006). The results of Lee *et al's* (2007) empirical investigation of dark visitor attractions in Korea indicate that all underlying dimensions of tourist's perceived value have a significant effect on satisfaction. However, Brady *et al's* (2001) cross-cultural study of Americans and Ecuadorian fast-food restaurant customers reveals that value-satisfaction relationship will vary from culture to culture. Service value-customer satisfaction path was found applicable in the American context and not applicable to the Ecuadorians. Therefore, this study tests the validity of the perceived value-visitor satisfaction path in the visitor attraction context in the UK through the following hypothesis:

*H3: Visitor satisfaction is determined by the perceived value of the attraction*

The impression given by the opposing opinions in the literature indicates no consensus on the causal order of service quality and visitor satisfaction: satisfaction-service quality or service quality-satisfaction. The weight of evidence supports the service quality-satisfaction order in general services management (see Shamdasani, *et al.,* 2008; Cronin *et al.,* 2000) and in tourism

(see Gonzalez, *et al.,* 2007; Zabka *et al.,* 2010). To this end, the fourth hypothesis in this study is:

*H4: Visitor satisfaction is determined by the perceived quality of the attraction.*

Mitttal *et al.* (2001) in a study investigating attribute performance and customer satisfaction over time suggest that future research should focus on understanding why the relationship between attribute performance and overall customer satisfaction is strong or weak in different situations for the same product or for the same customer and over time. Mitttal *et al.* (2001) opine that the process of developing conditional approach of this type is likely to provide better understanding of issues related to attribute performance and satisfaction. It was also noted that the antecedents of these two constructs are likely to be different. So could it be that perceived value is an antecedent of satisfaction in this relation since a number of studies (for example Bojanic, 1996; McDougall and Levesque, 2000) have found that perceived value is a significant driver of customer satisfaction. It would therefore be interesting to examine the influence of perceived value in the relationship between satisfaction and attraction attribute performance hence the fifth hypothesis is:

*H5: The influence of attraction attribute performance on visitor satisfaction is mediated by the perceived value of the attraction*

A number of studies have inferred the likelihood of variables intervening in the relationship between service quality and behavioural intentions. Services management literature in recent time has been hypothesising perceive value as a prominent moderator of behavioural intentions (see for example Petrick, 2002). Monroe (1990) found perceived value as a precursor to a person's willingness to buy and as an outcome of perceived product quality and perceived sacrifice. More recently, the results of Brady *et al's* (2001) study indicate that there is no direct path between customers' service quality evaluation and their behavioural intentions rather it is submitted that the effect is indirect through the consumer's service value assessment.

This leads to the sixth hypothesis:

*H6: The influence of perceived service quality on behavioural intentions is mediated by perceived value of the attraction*

In recent years perceived value has gained increased recognition as a reliable variable in predicting behavioural intentions (Heillier *et al.,* 2003). Value has been argued to be the most important indicator of repurchase intentions (Petrick *et al.,* 1999; Parasuraman and Grewal, 2000; Oh, 2000a). Zeithaml's (1988) mixed method study of the conceptualisation of perceived value of a service revealed that perceived value leads to purchase intentions. Sweeney *et al* (1997) in a retail context study concluded that overall value had the greatest influence on willingness to buy than functional, technical and product quality. Additionally, Pura (2005) in a study of effect of customer perceived value on attitudinal and behavioural component of loyalty concluded that behavioural

intentions and commitment were significantly influenced by customer perceived value.

*H7: Behavioural intention is determined by the perceived value of the attraction*

A plethora of scholars such as Baker and Crompton, 2000; Zeithaml and Bitner, 2000, and industry practitioners, particularly in the visitor attractions sector, often assume that improving quality service will increase sales. Zeithalm (1988) suggests that this assertion should be modelled and tested. In response to this call, a number of studies have been conducted to assess this assertion in both wider service marketing research (see for example Rust, Zahorik and Keiningham, 1995; Zeithalm *et al* 1996; Zeithalm, 2000) and the tourism and hospitality field (see for example Alexandris *et al.*, 2002; Yuan and Jang, 2007).

Even though there have been a number of examinations of this relation, yet there are still contentions. For instance Oloruniwo and Hsu (2006) noted that there are mixed opinions on the existence of direct relationship between perceived quality and behavioural intentions in all service context. Whilst Cronin *et al* (2000) found significant direct link between perceived quality and behavioural intentions in six service sectors namely: fast food, entertainment, spectator sports, participative sports, health care and long haulage ground transport; it was however noted that when data from individual sectors were tested separately only four of the sectors displayed a direct link between

perceived quality and behavioural intentions. Exceptions being health care and long haulage ground transport. It will be interesting to test the direct relationship between service quality and behavioural intentions, particularly in themed attractions. In view of this it is proposed that:

*H8 Behavioural intention is determined by the perceived service quality of the attraction*

It has been established that overall satisfaction is a powerful predictor of revisit intention as it represents a universal evaluation and general attitudinal construct (Mittal, Katrichis, & Kumar, 2001; Yuan and Jang, 2007). Similarly, Cole *et al.* (2002) found support for the proposition that suggests visitor satisfaction is likely to reinforce visitors' intentions of using a service again and engaging in positive word-of-mouth communication with family and friends. Consumers who are not familiar with the attributes of a product usually rely on word of mouth to acquire information (Basal and Voyer, 2000) hence Harrison-Walker (2001) submits that in comparison to external marketing strategies, word of mouth is more important and influential in terms of customers' attitude and behaviour. Yuan and Jang, (2007) in their exploratory study of a wine festival conclude that quality does not directly influence behavioural intentions; it has an indirect effect through satisfaction. Other studies that have found an indirect relationship between service quality and behavioural intentions include Woodside *et al.* (1989) - service quality relationship with intention to purchase. Oh (1999) and Joeng *et al.* (2003) also found that service quality influence repurchase intention and word-of-

mouth communication. Caruana *et al.* (2000) similarly documented service quality influence on loyalty. In the same vein, Lee *et al.* (2007) in an examination of the multiple dimensions of perceived value for tourism at a Korean war-related tourist site found that perceived value has an indirect effect on recommendation. In view of this, Lee *et al.* (2007) concluded that war-related tourist site satisfaction mediates the relationship between all the tourist perceived value dimensions of the site and tour recommendation.

*H9 (a): The influence of quality on behavioural intention is mediated by visitor satisfaction*

*H9 (b): The influence of value on behavioural intention is mediated by visitor satisfaction*

### 3.5 Research paradigm

Easterby-smith *et al* (1999 in Altinay and Paraskevas, 2008) identify three main reasons why a researcher must identify with a research philosophy to guide the conduct of a study, the reasons include:

- It enables the researcher to make informed decisions about research design;
- It enables the researcher to differentiate between research methods and avoid inappropriate use and unnecessary work by identifying the limitations of particular approaches;
- It enhances creativity and innovation and enables a researcher to adapt research design to cater for constraints.

According to Sarantakos (1998: 32) a paradigm is ‘a set of propositions that explains how the world is perceived; it contains a world view, a way of breaking down the complexity of the real world’. Paradigm is a system of ideas that depicts how the world works and how it is understood. It offers the research hints of what ‘is important, legitimate and reasonable’ (Patton, 1990: 37) and understanding of how to deconstruct the world’s complexity. Given this, an investigator can make use of a paradigm as a means of what make sense in the world.

Guba (1990) posited that all paradigms can be conceptualised on the basis of three major elements that influence the way a researcher thinks about the research process – epistemology, ontology and methodology. Epistemology is concerned with what constitutes acceptable knowledge in a field of study. Its premise is on the relationship between the researcher and the known world. Ontology focuses on the nature of ‘reality’. According to Saunders *et al* (2007) ontology, to a greater degree than epistemology, raises questions of the assumptions researchers make about the way the world operates and the commitment held to a particular view. The third element, methodology, denotes how the researcher attempts to discover knowledge through their epistemological and ontological perspectives.

There are two main research paradigms - Positivism and Interpretivism. Authors such as Hussey and Hussey (1997), Sarantakos (1998) and Tashakkori and Tiddle (1998) view each one of the two as being located at the either end of a continuum. Veal (2006) states that positivism has its roots in the physical

sciences and is a framework of research in which the researcher sees objects as phenomena to be studied from the outside, with behaviour to be explained on the basis of accumulated facts and observations using theories and models developed by researchers. The term positivism is often used to describe crude and superficial data collection, but it is possible to capture 'reality' through the use of research instruments such as questionnaires (Blaxter, Hughes and Tight, 2006). Positivism focuses on facts and formulates hypotheses and tests them against empirical evidence. It is basically associated with scientific research and promotes more objective interpretation of reality, using data from surveys and experiments. It often involves large samples and questionnaires, scales, test scores and experimentations as research methods. It provides clarity about what is to be investigated and could be considerably economical.

On the other hand, the interpretive paradigm has its roots in the social science and is concerned with methods that examine people and their social behaviour (Altinay and Paraskevas, 2008). It views research as an interactive process where the people being researched relate with the researcher and the findings, which are the outcomes of the interaction, highlight the meaning and understanding of the situation or phenomenon being investigated (Crossan, 2003). It assumes that reality varies because it is a mental construction by individuals. This view also favours using a wide range of techniques in studying small samples in depth, with the prospect that this can facilitate the establishment of a defensible position rather than absolute truth.

In between the two extreme ends of the research continuum occupied by these paradigms exists a number of other paradigms. Jennings (2001) identified four additional paradigms in tourism research namely, critical theory, feminist perspectives, post-modernism and chaos theory. In addition, Saunders *et al* (2007) identify realism, located within a post-positivist worldview, and pragmatism. The positivist paradigm, as stated above, assumes that reality can be entirely understood and explained; post-positivists, in contrast, postulate that reality can only be approximated when studying behaviour and actions of humans (Creswell, 2009). Realism leans towards scientific enquiry and can be divided into direct realism and critical realism. Pragmatism assumes a more neutral position. Jennings (2001) argues that theoretical paradigms are rigid and unyielding in their ontology; this in no small measure has manifested itself in a number of arguments generated over the years as to which paradigm is more superior or more appropriate (see for instance Lincoln and Guba, 2000).

Johnson and Onwuegbuzie (2004), however, note that a basic consensus has been reached on some of the contentious issues. They point out that the following views are now widely held:

- What appears reasonable can vary from person to person;
- What is noticed and observed is affected by an individual's background knowledge, theories, and experiences; observation is not a perfect and direct window into "reality";
- It is possible for more than one theory to fit a single set of empirical data.

- A hypothesis cannot be fully tested in isolation because to make the test the researcher must also make various assumptions; the hypothesis is rooted in a universal network of beliefs; and alternative explanations will continue to exist;
- The recognition of obtaining only probabilistic evidence; there is no final proof in empirical research;
- Researchers are part of communities and they clearly have and are affected by their attitudes, values, and beliefs;
- That human beings can never be completely value free, and that values affect what is chosen to be investigated, what is seen, and how the thing that is seen is interpreted.

Jennings (2001) believes that it is the researcher's responsibility to consider the nature of the research topic at hand and the limitations of the proposed study prior to taking appropriate epistemological, ontological and methodological positions. She further opines that the choice of research paradigm should not be determined by the researcher's training, personal choice or beliefs about paradigm superiority; rather the focus should be on how best to achieve the aim of the research.

In this study, the researcher's main concern was to adopt the most appropriate epistemological position and research methodology. The epistemological position adopted is critical realism, which according to Saunders *et al* (2007) relates to positivism as it employs scientific approach to the development of data. Critical realism on one hand adopts an objective view of the subject being

studied and on the other, exposes reality to critical analysis (Trochim and Donnelly, 2007; Saunders *et al.,* 2007). This approach attempts to study external reality in an objective manner as well as recognises that observations are subject to error, which consequently renders theories to constant revision (Trochim and Donnelly, 2007; Creswell, 2009).

The basis of scientific reality of the existence of a phenomenon/construct, whether observable or not, is on the foundation of three principal elements: objects, entities and structure (Patomaki and Wight, 2000). These elements ultimately facilitate the manifestation of events. Critical realism as an epistemological position is the critical application of realism in producing layers of understanding of the world, distinguishing the actual from the empirical. According to Saunders *et al* (2007) critical realism postulates that human experiences are sensations of the things in the real world hence the actual is different from the empirical. The theory of critical realism questions the ability to know reality with certainty. Critical realism acknowledges that the world is composed of events, experiences, impressions, discourses and states of affair; it goes further to emphasise that these have underlying structures, powers and tendencies, which may be observable or unobservable through experience and/or discourse (Patomaki and Wight, 2000).

The rationale for scientific enquiry is to know whether or not things are really as described and to understand what make them appear the way they do (Patomaki and Wight, 2000). If the aim of scientific enquiry is to be achieved, then, a study has to go beyond what can be seen to understand the underlying

structure that give rise to the phenomenon, after all "What we see is only part of the bigger picture" (Saunders *et al.*, 2007: 105). Critical realism acknowledges the presence of interaction between the knower and the known. It is the transaction between the knower and the independent reality that facilitates a very different understanding of the 'real' (Johnson and Duberley 2000).

One of the important tenets of critical realism is the recognition of the significance of multiple level of phenomenon hence the advocacy for multi-level study. The use of a mixture of qualitative and quantitative methods is crucial to this philosophy in the investigation of both observable and non-observable causal conditions. Critical realism postulates that the observable behaviour of people, object and event is not understandable except if seen in the causal context of non-observable structure, inherent characteristic and interaction in the object/event hence "observed constant conjunctions may be explained as being connected by an underlying necessity which derives from the essential structure of the observations in question" (Johnson and Duberley 2000:154). In essence the philosophy of critical realism enable the identification of causation and exploration of the mechanism of cause and effect that underlie events; such mechanism which may not be observable but are real and can be proved to be real in social science research (Patomaki and Wight, 2000; Saunders *et al.*, 2007). The philosophy of critical realism presupposes that investigating each level has the capacity to enable the knower to understand the changes in the known.

In light of the above, this study has utilised a mixed-method research strategy to produce both qualitative and quantitative data in order to explore both the observable and the underlying structures and mechanisms of the constructs under investigation. The limitations of the research in terms of reliability and validity of methods and the extent of generalisability of the results are acknowledged. In addition, emphases are laid on the practical implications of the research outcomes.

### 3.6 Research approach

The role of theory in research cannot be over emphasised. Although theory may or may not be explicitly articulated in the research design, it is often clearly applied in the discussion and summary of the findings. Saunders *et al* (2007) posit that the extent of the explicitness of theory at the onset of the research raises a significant question regarding the research design – that is whether the research should employ deductive or inductive approach/reasoning. This section explores the two aforementioned research approaches and forms of reasoning, and discusses their applicability in and implications for this study.

Deductive theorists derive their inferences by rationalising reason to a given set of assumptions. Often in quantitative research, deductive reasoning employs theory to drive the research from the beginning and the hypotheses formulated determine the type of evidence the researcher will gather (Grix, 2004; Saunder *et al.,* 2007 and Creswell, 2009). The theory becomes a framework for the investigation, a model that helps organise the research question or hypothesis

and data collection procedure (Creswell, 2009). This approach is notably the domain of scientific research hence it is very predominant in positivist research. Robson (2002, in Saunders *et al.*, 2007) identify five progressive stages of the deductive research approach:

- Formulation of testable proposition (hypothesis formulation);
- Operationalization of terms – indicating precisely how the concepts will be measured;
- Hypothesis testing;
- Examination of specific outcomes;
- Modification of theory in line with findings.

Testing and verification of theories are in the form of explanation in order to answer research questions or hypotheses. In this investigation, hypotheses were developed at the outset through an exploration of the pertinent literature. Fundamentally, a crucial characteristic of a hypothesis is that it must be falsifiable. It has to be logically possible to make a true observational statement which is at variance with the hypothesis and thus can falsify it (Grix, 2004, Creswell, 2009). Theories which respond to these problems are formulated through observation, and are therefore naturally inductive (Grix, 2004). Observations often profile problems in the light of existing theories, and therefore give rise to provisional alternative theories, offered as hypotheses (Walliman, 2011). Just one conflicting observation is sufficient to falsify theory statement – such is the strength of this form of research approach. This argument may form a logical and justifiable basis for the choice of this method.

In view of the focus of this study - understanding how visitors to attractions evaluate quality, and investigating the relationship between perceived quality and customer satisfaction, the deductive approach is deemed useful and appropriate as it allows causal relationships to be explained (Saunder *et al.*, 2007). Again, the deductive approach allows for the operationalization of concepts; this is particularly relevant to this study, where the concepts under investigation have been and are still going through rigorous academic. However, the research design for this study does not entirely lend itself to a deductive reasoning approach.

An inductive argument only offers support for the conclusion rather than providing irrefutable grounds for truth (Walliman, 2011). In essence, an inductive argument can neither be correct nor incorrect (Walliman, 2011, Saunder *et al.,* 2007). Consequently, the strength of an inductive argument is dependent on the weight of the support it offers its conclusions; the stronger the support, the more likely the conclusions will be true (Walliman, 2011). According to Altinay and Paraskevas (2008), induction is a process where the researcher draws a conclusion from one or more particular pieces of evidence. This is sometimes done to explain why a particular phenomenon is taking place (Altinay and Paraskevas, 2008). This type of research is usually associated with qualitative research strategies (Altinay and Paraskevas, 2008).

This inductive approach is particularly useful in establishing a cause-effect link between variables and facilitates an insight into how humans interpret these

variables in their social world (Altinay and Paraskevas, 2008). Owing to its flexible nature this approach is also particularly useful for facilitating the identification of alternative theories on the research topic and changing the research emphasis as the research progresses (Altinay and Paraskevas, 2008). It uses empirical evidence as the foundation of the reasoning process and can be easily applied (Altinay and Paraskevas, 2008).

One of the advantages of an inductive approach is that it is more effective with a small sample (Altinay and Paraskevas, 2008). In addition, it is generally more time consuming, as ideas are generated over a much longer period of data collection and analysis. However, the risk of the research yielding no useful data patterns and theories is higher than with deductive research (Saunder *et al.*, 2007 and Altinay and Paraskevas, 2008).

Deductive and inductive approaches to reasoning, in essence, attempt to provide explanation of the truth from opposing directions (Walliman, 2011). It can be inferred that the inductive argument seeks the truth from the particular to the general, and the deductive argument, from the general to the particular (Walliman, 2011). Additionally, the strength of deductive reasoning is based on it logical form, and not particularly on the content of the statements presented (Walliman, 2011).

Whilst both approaches are straightforward ways of distinguishing kinds of social science research, most studies include elements of both (Grix, 2004). Data are rarely collected without some explanatory model in mind. It is

impossible to do research without some initial ideas. Therefore, there is always an element of deduction in any research (Grix, 2004, Veal, 2006). Conversely, it is not possible to develop hypotheses without information on the subject (Veal, 2006), so there is also an element of induction. Thus most research is a mixture of inductive and deductive models (Veal, 2006) and it is very advantageous to mix the methods (Saunders *et al.*, 2007).

This study consists of existent and relational elements (Reynolds, 1971 in Walliman, 2011). The researcher recognises that 'instances of concepts exist in the real world' (Walliman, 2011:108) – visitors perceive quality in attraction products – the existent element; and that the occurrence of one concept refers to the existence of another and describes a causal relationship between two or more concepts – relational element. In order to gain an insight into how visitors interpret and evaluate quality at attractions and to develop hypotheses, at the beginning of this investigation, the researcher drew on previous studies in the literature and from the findings of preliminary primary research using interviews, analysis of organisations' website and free elicitation (see sub-sections 3.7.1; 3.7.2 and 3.7.3). The hypotheses generated therein were then empirically tested based on the data gathered through questionnaire surveys at the two attractions. Therefore, this research project adopts a mixture of inductive and deductive approaches.

### 3.7 Research method – qualitative versus quantitative

One of the challenges a researcher faces when both qualitative and quantitative data are required in answering the research question is the choice of research

method. Research method, as oppose to methodology, relates to the approach to data gathering and analysis. The nature of the study at hand normally determines the data collection and analysis method and the sources of information. It is important for the researcher to take into account the time necessary to collect the data and the best time for data collection in order to gather viable information in an optimal manner. Walliman (2011) posits that it is often appropriate to decide first on the type of analysis required to investigate the research problem, and then the type of data to be collected in order to undertake the analysis. Also, it is important to consider the tools, techniques and resources required bearing in mind that different research strategies will require different methods of data collection and analysis. Often two methods of data collection and analysis are identified –quantitative and qualitative.

Quantitative research is empirical research where the data are in the form of 'hard' numbers whilst qualitative research involves predominantly the gathering of 'soft' non-numeric data. Quantitative research is inclined to involve relatively large-scale and representative sets of data which often is erroneously seen as being about the gathering of 'facts' (Blaxter *et al.*, 2006). The approach relies on numerical evidence to draw conclusions or to test hypotheses. Notable techniques used under this method include experiment and survey. The use of quantitative approach is common in tourism studies particularly in the area of satisfaction, quality and value (see Zabka *et al.*, 2010).

By comparison, qualitative research mostly centres on exploring, in detail, smaller numbers of cases and focuses on achieving 'depth' rather than 'breadth' (Blaxter *et al.*, 2006). The approach is frequently employed in gaining an in-depth understanding of a few individuals in contrast to a more limited understanding of a large, 'representative' group. Focus groups, semi-structured and in-depth interviewing and participant observation are the most frequently used methods in gathering qualitative data.

Whilst quantitative method is predominantly employed in testing theory, it can also be utilised for exploring new research areas and developing hypotheses and theory (Blaxter *et al.*, 2006). By comparison, qualitative research is customarily employed in theory building (Blaxter *et al.*, 2006). Qualitative data may sometimes include quantifications, for example statements such as least, most, as well as specific numbers (Blaxter *et al.*, 2006). This approach was employed in the free elicitation survey as the basis of identifying the attributes of attraction quality.

Respondents were asked to identify and list the attribute according to their importance and identify what they liked most and what they liked least (refer to 3.7.2 for detailed information about the free elicitation process and result). In the same vein, quantitative methods (e.g. large-scale survey) can also collect qualitative data through open-ended questions (Blaxter *et al.*, 2006), a strategy which was also employed in this study to gather information-rich data. In the main questionnaire two open-ended questions were included. These required

respondents to identify the attribute of the attraction they liked most and the one(s) they liked least.

In contrast to quantitative methods, qualitative methods take the position that the researcher's communication with the subject and the environment being studied is unequivocally part of the knowledge rather than an interfering variable (Grix, 2004; Saunder *et al.,* 2007); hence the subjectivity of the researcher and the subjects being studied are an integral part of the research process. Qualitative research methods, as a result of the use of limited examples in relation to explanations, are considered to be inadequate. Generalisation from small or few cases raises the question of the validity and reliability of the results (Grix, 2004).

There is no doubt that that there are a number of arguments about the superiority of either qualitative or quantitative method. For instance Flick (2009) contends that quantitative methods are only research economic shortcuts of the data generating process; qualitative methods, on the other hand, are able to provide the actual scientific explanation of facts. Flick (2009) concludes that qualitative research does not necessarily require the quantitative methods in later stages of research but quantitative research needs qualitative means for explaining its findings. It has been argued that perhaps there are some facets of human action, especially behavioural phenomenon, that are difficult to capture or 'measure' quantitatively (Grix, 2004). Moreover, sole dependence on quantitative methods can lead to a neglect of the social and

cultural contexts in which the 'variables' being 'measured' operate (Grix, 2004).

Crossan (2003) advocates that philosophically, qualitative and quantitative methods are not as dissimilar or mutually incompatible as often portrayed. In line with Crossan's (2003) argument, Knox (2004) contends that quantitative methods are just as appropriate within an intrepretivist piece of research as within a positivist approach. Perhaps triangulating methods would be able to capture the advantages of both methods.

### *3.7.1 Adoption of mixed methods*

For many years the advocates of quantitative and qualitative research approaches have been involved in keen debate about the superiority of one method over the other (Johnson and Onwuegbuzie, 2004). Evidently, both methods have their limitations. However, it is considered that biases inherent in one method could counteract or annul the biases in the other hence, a means for seeking convergence across qualitative and quantitative methods became established (Creswell, 2009). The goal of 'mixed methods' is to draw from the strength of each method and minimise the weaknesses of both in single research studies and across studies (Johnson and Onwuegbuzie, 2004).

Mixed methods have been widely used in tourism research (see Walle, 1997; Jenkins, 1999) because it is beneficial to combine different field methods in order to minimise the weaknesses of individual approaches. Creswell (2009) suggests the use of multi-methods strategy, as this would improve the

researcher's ability to determine the accuracy of findings as well as convince the audience of that accuracy. The position of the post-positivist, particularly a critical realist, is that all measurements are fallible hence it becomes important to employ multiple measures and observations and use triangulation to obtain a better representation of reality.

The term triangulation refers to the use of multiple methods to corroborate the reliability of a particular research tool and the validity of the data collected (McNeill and Chapman, 2005). Typically this will involve combining quantitative and qualitative methods to ensure the accuracy of the data gathered through each method (McNeill and Chapman, 2005). Cresswell (2009) suggests triangulating different data sources of information by examining evidence from the sources and using it to build a coherent justification for themes. The process where themes are established on the basis of converging several sources of data or perspectives from participants can add to the validity of the study (Cresswell, 2009). In this study, the development of the attraction quality construct was based on this process (see scale development for a detailed discussion).

The mixed-method approach is not without its demerits. A multi-methods approach can be expensive and produce enormous amounts of data which can be difficult to analyse (Devine and Heath, 1999). Devine and Heath (1999) stress that multiple methods are likely to come up with incongruous findings, which results in the question of what to do with the data (whether to merge all or ignore some of the data). However, there are few areas of tourism research

such as holidaying, visitation of attractions and consumption of other leisure related products like hotel stay and eating-out, where one research method alone is sufficient, and consequently, social science research is becoming increasingly pluralistic (McNeill and Chapman, 2005). While people's actions are a result of their interpretation of the situation, their interpretations and their choices may also be limited by structural factors external to them and beyond their control as in the case of the performance (quality) of visitor attractions (McNeill and Chapman, 2005).

The use of multiple methods can be introduced to a study at any stage of the research process – from the initial exploration of the topic or concept(s) through data collection to the analysis stage (Creswell, 2009). It has been advised that researchers should carefully consider the reason for choosing individual methods, the study aim and hypotheses and the main philosophy underpinning the investigation (Creswell, 2009, Tashakkori and Teddlie, 2003 and Greene and D'Oliveira, 1999). Creswell (2009) identifies four important aspects that influence the design procedure for a mixed methods study. These factors are timing, weighting, mixing and theorizing (transforming) perspectives.

The issue of timing relates to whether the gathering of the two types of data (qualitative and quantitative) will be in phases or will run concurrently. Where the data are collected in phase either of the two can come first depending on the intent of the researcher or the nature of the study. Currall and Towler (2003) posits that when qualitative data are collected first, the intent is likely to

be that the researcher wants to explore the topic with the aim of expanding the understanding through a second phase in which data are collected from a large number of subjects. This idea is in line with the procedure predominantly followed in this research.

On the other hand, in some cases, it may be undesirable or unpractical to collect qualitative and quantitative data at different times. In this case, data are collected concurrently and simultaneously implemented. In the second phase of the current study, qualitative data were collected concurrently with quantitative data using open ended questions in the primary research instrument (see further detail in questionnaire design).

The second aspect identified by Creswell (2009) is weighting, which connotes the priority. Depending on the nature of the study, the weight might be equal or one method may feature more dominantly over the other. Creswell (2009) submits that the priority given to any of the two methods will be determined by a) the research's interest; b) the audience of the study and c) what the investigator intends to emphasise in the study. In this study more emphasis is on the quantitative data owing to the focus of the study (enumerated in chapter one)

Mixing is the third aspect and it entails the amalgamation of the two methods at some point(s) in the research. According to Creswell (2009), mixing will normally take place in one of three forms. Either the data are combined at one end of the continuum, kept separate at the two ends, or blended in some way

between the two extremes. It is possible to have the two data bases kept separate, however, they must be connected. As in this project, the results from the initial qualitative research were used as the basis of developing the research instrument for the second phase, hence connecting the first phase to the second.

Connecting here denotes a mixing of both qualitative and quantitative research whereby the connection takes place between the data analysis of the first research phase and the data collection of the second research phase. Walle (1997) pointed out that this approach is widely used in tourism and marketing studies but noted that rigorous quantitative methods are being supplemented with qualitative method to address the loss of relevance amongst practitioners. In this light and as stated earlier, some qualitative data are gathered concurrently in the second phase along with a large amount of quantitative data. The qualitative themes were however transformed into counts and compared with descriptive quantitative data. In this case, the mixing involves integrating the qualitative and quantitative data by combining the two.

The fourth aspect, theorizing, is concerned with the theoretical perspective that guides the entire design of the study. Typically, theories used in guiding the research are contained in the sections detailing framework that shapes the type of questions asked, who participates in the study, how data are gathered, and the implications made from the study (Creswell, 2009). The theoretical lens utilised in this study is the hierarchical perspective to evaluation of service quality perception, modelling quality as a formative construct (see 2.8.4.4) using a 'performance-only' framework (see 2.12).

A number of typologies and classifications of mixed methods exist. Creswell *et al.*, (2003) advanced six types of mixed methods strategies:

- Sequential explanatory strategy;
- Sequential exploratory strategy;
- Sequential transformative strategy;
- Concurrent triangulation strategy;
- Concurrent embedded strategy;
- Concurrent transformative strategy.

In this research, a sequential exploratory mixed methods approach was adopted; involving a first phase of qualitative data gathering and analysis, followed by a second phase of quantitative data gathering and analysis based on the results of the initial qualitative data. The sequential exploratory strategy is particularly advantageous when research is building a new instrument and confirming a scale (Creswell, 2009; Devellis, 2003 and Churchill, 1979), like the one built in this study to determine quality attributes of visitor attractions.

In addition to the sequential exploratory procedures, a slight concurrent embedded mixed methods perspective was incorporated at the second phase. Concurrent embedded mixed methods procedures are those in which the researcher collects both quantitative and qualitative data simultaneously in one phase. In this type of design, the researcher collects both forms of data at the same time and then integrates the information of the overall results. For this reason, two sets of questionnaires which included both quantitative and

qualitative questions were designed for the current research and used in concurrent surveys.

### 3.8 The first phase

A very important step in developing superior measures for marketing constructs is the generation of indicators that will accurately describe the construct (Churchill, 1979 and Rossiter, 2002), in this case attraction service quality. Typically productive techniques of generating items for exploratory research according to Churchill (1979) include: literature search, experience survey (e.g. expert judgment) and insight-stimulating examples (e.g. interviews, product examination/comparison, and critical incident analysis).

In order to explore how visitors evaluate service quality within the UK visitor attractions sector, an initial qualitative research was conducted in November 2008 to February 2009; November 2009 and October 2010. Unstructured interviews, free elicitation and expert opinion were employed using purposive samples in addition to the review of the literature; the first phase of qualitative research was used as the basis for generating scale items for the questionnaire surveys to ensure content validity.

Figure 3.2 shows the initial pool of quality attributes was accumulated from four different sources – interview, free elicitation, attractions' websites and literature sources. The process and number of quality attributes generated are further explained in the subsequent sections.

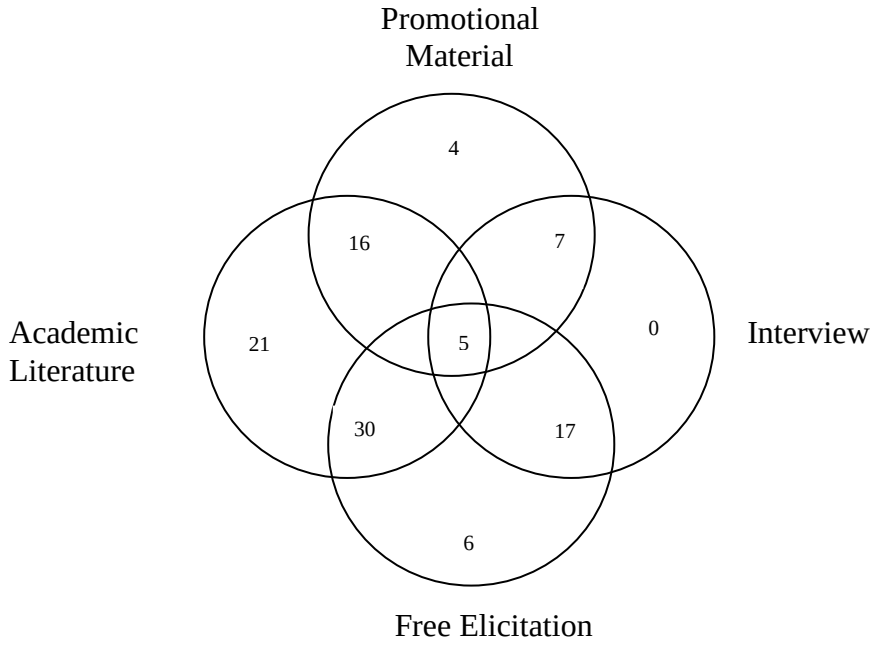


Figure 3.2 Attribute Sources

This stage and the second quantitative phase partially followed Rossiter's (2002) framework of the procedure for scale development in marketing (see Figure 3.3). The procedure includes the six stages of Construct definition, Object classification, Attribute classification, Rater identification, Scale formation and Enumeration – C-OAR-SE. C-OAR-SE is based on content validity, established by expert agreement after pre-interviews with target raters.

In C-OAR-SE, constructs are defined in terms of Object – the perceived quality of case visitor attractions; Attribute – attraction features identified through literature, free elicitation, interviews and content analysis of case attractions' websites; and Rater Entity – attraction visitors, experts in attraction and services management.

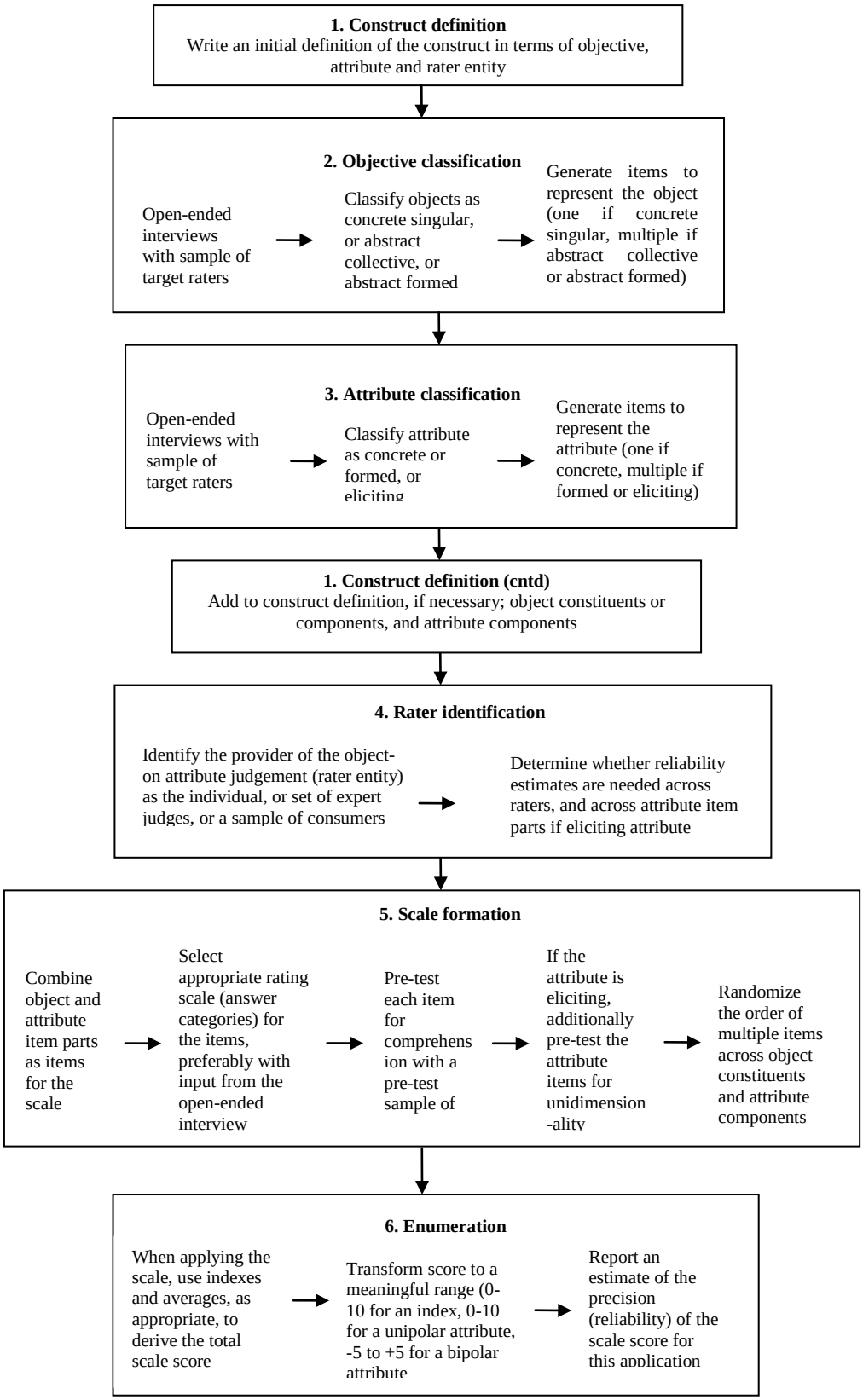


Figure 3.3 Steps in the C-OAR-SE Procedure Source: Rossiter, 2002

The Object classification and Attribute classification steps in C-OAR-SE offer a framework (six types of scales) signifying when to use single-item in opposition to multiple-item scales and, for multiple-item scales, when to use an index of essential items rather than choosing unidimensional items with a high coefficient alpha (Rossiter, 2002).

The Rater Entity type largely determines reliability, which is a precision-of-score estimate for a particular application of the scale. (See sub-sections 3.8.6.1 and 3.8.6.2 for a detailed discussion on reliability and validity and how these relate to this study).

The following sub-sections offer detailed explanation of the qualitative data collection for scale development using the three afore-mentioned methods and the subsequent triangulation of result to enhance construct validity. Following the COARSE procedure, the stages in the development of the questionnaire are outlined in Figure 3.4

### *3.8.1 Unstructured interview*

According to Walliman (2011) the most important issue when setting up an interview is for the researcher to known what is to be achieved. Therefore, the structuring of an interview depends on the type of information the researcher intend to collect. A tightly structured interview with closed questions can be more desirable where precise answers are required. In contrast where a

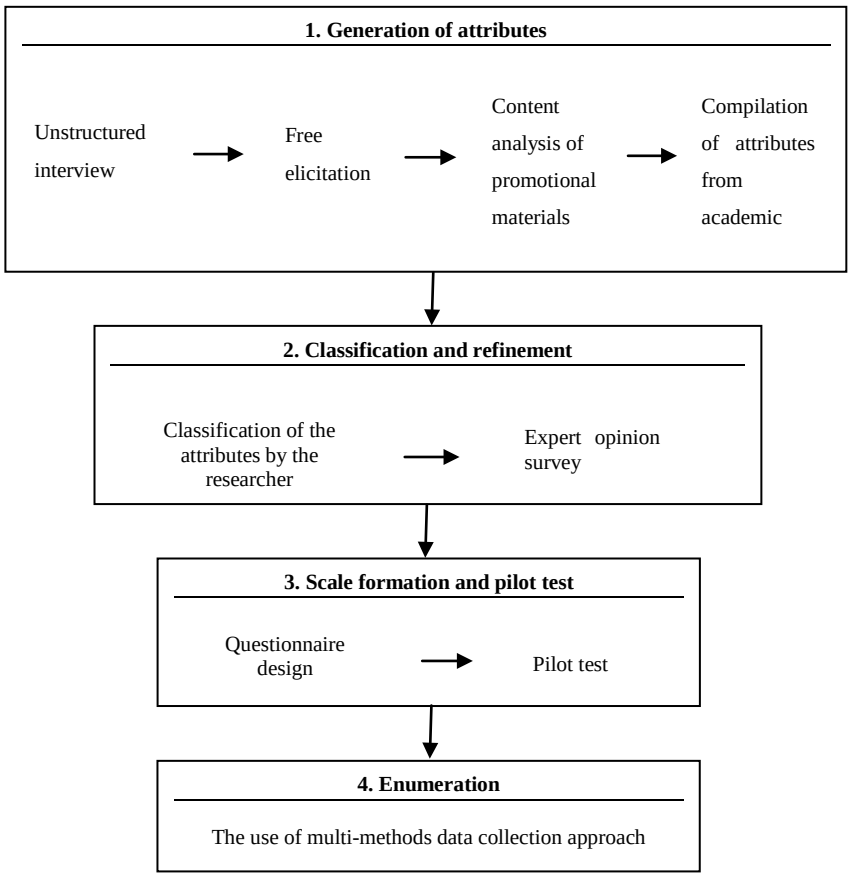


Figure 3.4 Stages in the Questionnaire Development and Distribution

researcher needs to explore a situation or phenomenon and wishes to obtain information that cannot be easily predicted; an open and unstructured form of interview may be more appropriate (Walliman, 2011). An unstructured interview (in-depth interview) does not employ a formal, prescriptive interview schedule and predetermined questions rather it is guided by a pre-defined list of issues and the exchange between the interviewer and the interviewee is similar to a conversation (Ryan, 1995).

Robson (2002) notes that in conducting an exploratory research the use of in-depth interviews is particularly useful because it facilitates knowledge of what is obtainable and helps in seeking new knowledge. At this stage of the study,

an exploratory strategy was employed to gather data regarding attributes that determine the formation of quality perception in visitor attractions. This is very useful in clarifying a controversial problem with little or no existing data; it is equally flexible and adaptable to change (Saunders *et al.*, 2003).

An unstructured interview can be used to explore in depth a general area as it does not necessarily need a list of predetermined questions but a clear idea of what to be achieved. Here the interviewee is given considerable opportunity in presenting his or her opinion and belief freely about the subject matter; and new questions may emanate from time to time (Walliman, 2011). Even though an unstructured interview approach was employed, the interview was guided by the literature in terms of questions asked and topic discussed. The interview first sought general information relating to attraction visited, nature of visit (family and friend, excursion or field trip) and number in party. Then the emerging issues relating to quality perception were discussed. The respondent perception of quality was identified with questions ‘what features do you consider before choosing an attraction’; ‘what are the important attributes that an attraction must have?’; ‘can you separate the attributes into categories - essential and desirable?’ the interviewees were requested to based their answers on one attraction visited in the last one year. This was to prevent confusion and to ensure that they remember vividly issues concerning the study.

#### *3.8.1.1 The interview sample and procedure*

For any type and scale of research, the technique for sampling is crucial. A carefully planned sample will produce useful and reliable results. Saunders *et al* (2003) advise that when collecting data consideration must be given to usefulness, credibility, available resources and what to be discovered. They add that it is important to note that the sample for collecting qualitative data cannot often be considered a statistical representation of the whole population. Given the above situation, a snowball sampling (a non-probability sampling technique) was selected in order to have an insight into how visitors to attractions evaluate quality and the measures they use. It was clear that the exploratory intention of this phase of the study would be adequately met since the intention at this stage is to gain an insight into the subject.

Snowball sampling is a type of purposive sampling that enables the researcher to identify individuals that meet certain criteria for inclusion in a given study and subsequently help in recruiting people with the characteristics sought by the researcher (Walliman, 2011). Some of the weaknesses of this sampling technique include issues associated with the difficulty of maintaining respondent anonymity and possible bias because of their closeness (Lee, 1993 in Saunders *et al.,* 2003), and with the researcher as the choice maker. On the other hand, snowball sampling is useful when the target population is difficult to reach (Saunders *et al.,* 2003; Walliman, 2011). It is cost efficient and increases the credibility of research because participants with first level experience are involved with the research process. Credibility is one the four criteria against which Lincoln and Guba (1985) argue the validity,

generalisability, and reliability of qualitative research can be tested. Reliability and validity of qualitative data is explained further in sub-section 3.9.6.1.

A sample was drawn from a cross section of the city of Wolverhampton and in the researcher's university community of the University of Wolverhampton, Walsall campus. One individual who had recently visited the Black Country Museum was identified and a snowball sample resulted from his subsequent recommendation. The individuals interviewed included professional, semi-skilled workers and students. In total, eleven respondents comprising seven females and four males took part in this phase of the research. Table 3.1 shows the composition of respondents who took part in phase one (part one) of this qualitative research.

The interviews were conducted between November 2008 and February 2009 and ran for 20 minutes on average. All respondents that took part in the interviews were assured that the information provided would only be used for academic purposes and would be anonymous. The key objective of the qualitative research was to obtain relevant information to shape the design of the questionnaire.

#### *3.8.1.2 Analysis of the interview data*

The interviews were carried out to give insight into the attributes that are used by visitors in evaluating quality in attraction settings. The underlying aim here was to start the process of scale development. Data gathered through the unstructured interviews were analysed employing template analysis. King (1998 in Saunders *et al.,* 2003) describes template analysis as an approach to analysing qualitative data and consequently a template as an essential list of the

codes or categories that represent the themes revealed from the data that have been collected. Template analysis makes use of a combination of deductive and inductive approaches to qualitative data analysis; codes are predetermined and can be adjusted in the course of data collection and analysis.

Table 3.1 Composition of Interview Respondents

| Subject | Gender | Age group | Occupation | Attraction visited | Nature of visit |
|---|---|---|---|---|---|
| R001 | Female | 25 – 34 | Lecturer | Black country Living museum, Dudley | Visited alone |
| R002 | Female | 35 – 44 | Teacher | Water World, Stoke | Visited with family (group of 6) |
| R003 | Male | 25 – 34 | Lecturer | Tretham Gardens /Monkey forest, Stoke | Visited with family (group of 3) |
| R004 | Female | 18 – 24 | waitress | Drayton Manor Park | Visited with friends (group of 4) |
| R005 | Female | 18 – 24 | Student | Cadbury World | Visited with classmates (large group) |
| R006 | Male | 18 – 24 | Student | Drayton Manor Park | Visited with friends (group of 4) |
| R007 | Female | 35 – 44 | Local Council employee | Dudley zoo | Visited with family (group of 3) |
| R008 | Male | 35 – 44 | Lecturer | Alton Towers | Visited with family (group of 4) |
| R009 | Female | 45 – 54 | Doctor | Ironbridge Gorge museums including Blists Hill Victorian Town | Visited with family (group of 4) |
| R010 | Male | 18 – 24 | Apprentice | Alton Towers | Visited with family (group of 5) |
| R011 | Female | 45 – 54 | Lecturer | Tretham Gardens /Monkey forest, Stoke | Visited with family (group of 3) |

From the analysis Figure 3.5 was derived with nine main categories emerging. The initial step in the analysis was to develop conceptual themes, then cluster them into broader groupings based on respondent answers to questions during the interviews. King (2004) contends that the interview schedule can be drawn

from the literature, researcher's personal experience, anecdotal and informal evidence, and exploratory research. He further argues that respondent answers to the main questions from the interview schedule can serve as higher-order codes with answers to secondary questions as potential lower-order codes. To this end codes were drawn from the respondent answers to the questions. The question 'what features do you consider before choosing an attraction' formed the main body of the template. The higher order codes were drawn from the literature and lower ones were elicited by probing. Based on this, nine primary themes developed. Two of the emerged themes were later excluded since, according to the literature, they do not measure quality. It was also later confirmed by expert opinion that price and image be eliminated.

### *3.8.2 Free elicitation*

After the exploration of pertinent literature relating to quality evaluation and perception formation, and in order to gain further insight into the features which visitors used in evaluating quality at attractions free elicitation technique was administered. The free elicitation approach is a popular procedure used in cognitive research to identify attributes that an individual believes is significant to them (Moore *et al*., 2008). According to Reilly (1990) free elicitation is a valuable and inexpensive tool that involves word association. This technique can be used in a wide range of survey models and has been used in marketing (e.g. Steenkamp, 1997), tourism (e.g. Schofield, 2001) and higher education (e.g. Moore *et al*., 2008) research to formulate attributes.

- **Facilities**
  - Layout and design
  - Signage and direction
  - Size of site
  - Setting
  - Facilities for children

- **Cost/price**
  - Reasonable fee
  - Value for money

- **Accessibility of attraction**
  - Transportation
  - Transport infrastructure
    - parking
    - disable facilities
  - Time and distance of travel

- **Experience**
  - Unique experience
  - Entertainment
  - Recreation
  - Authenticity
  - Education
  - Exhibits
  - Something for everyone

- **Opportunity**
  - Opportunity for bonding
  - Opportunity to have a walk

- **Attractiveness of attraction**
  - Cleanliness
    - Cleanliness of restroom
    - General cleanliness
  - Visual appeal

- **Service Personnel**
  - Neat appearance of staff

- **Image**
  - Position in the market
  - Good reputation among general public

- **Technology**
  - The use of technology

Figure 3.5 Interview Data Template

#### *3.8.2.1 The sample and procedure*

The participants were year one undergraduate students studying Tourism Management, International Hospitality Management, Sport Management and Event and Venue Management at the University of Wolverhampton. The participants had been to Blists Hill Victorian Town on a field trip at the start of the 2009/10 academic year. It was also ascertained that an appreciable number of these students had also visited Alton Towers within the previous year. This particular group was used for its rich and available source of information. Although Gallarza and Saura (2006) point to the fact that the use of students particularly for research on value has been criticised, it has also been noted that students represent an important segment of the leisure market which cannot be ignored (see Mattila *et al*, 2001). In addition, this 'educational' market is a viable sampling frame given the Blists Hill Victorian Town case study. As a result, the student sample also provides a degree of homogeneity which facilitates a more direct comparison of the data from the two attractions. This convenience sample was useful in providing the researcher with the opportunity to reach suitable subjects because formal on-site access was restricted, as is always the case in attraction studies. Convenience sampling often suffers from biases and is potentially unrepresentative of the population under study. However, the aim of this stage of the research was to identify and explore issues not encapsulated from the literature review and interview. The stage was an additional step taken to ensure the validity of the attraction attribute scale. Section 3.9.6 provides further details about how validity and reliability was ensured in this study.

The participants in this phase of the study were afforded the opportunity to further explore issues relating to the features of the case attractions that helped them in forming their perceptions of quality. The researcher allowed the participants to explore issues perceived as important even where these were not supported by the literature. The free elicitation was through a paper-based tool with open-ended questions. As the researcher was aware of the profile of the participants, there was no need to seek information relating to general behaviour; however, the proportion of participants that were first timer or repeat visitors was ascertained by asking the following question. “Were you a first time visitor to Blists Hill Victorian Town during the September 2009 induction?” For Alton Towers, the participants were asked: “Have you ever visited Alton Towers before?” and requested to indicate whether they had visited the attraction once or more than once. This information was not subsequently used in the main survey because it was believed that it was likely to give the study another perspective, which would have rendered it too broad, unfocused and less manageable.

Participants were requested to complete a two page open-ended paper-based free elicitation too, one page related to Blists Hill Victorian Town, the other to Alton Towers, although both pages contained identical questions. The respondents were made aware of the purpose of the exercise and were informed that they could opt out if they did not want to take part in the survey. In order to elicit information regarding the features of the attractions’ the participants were asked to write down the elements of the attraction which most influenced

their experience using a table provided. They were further requested to rank these features using the same table. The tool contained three additional open-ended questions: 1) What did you particularly like? 2) What did you particularly dislike? 3) Which of the element(s) contributed to your overall positive experience of quality?

#### *3.8.2.2 Treatment of the free elicitation data*

A total of 34 completed free elicitation statements were returned by the 56 students who had been on the trip. All of the completed returns were usable even though some were not fully completed this did not affect the usefulness of the data since the aim was to elicit additional information that did not come out of the review of literature. The technique helped to minimise the potential bias from an exclusively literature-generated attribute pool and did not restrict the generation of attraction features to researcher imposed pre-coded options. The technique was a valuable means of collating attributes that are important to the target population.

The features that were identified by the respondents were first recorded under the heading of each case attraction (see Tables 3.2 and 3.3). They were subsequently analysed employing the Summation approach (Jennings, 2001). Most of the identified attributes fell within the categories stated in the template in Figure 3.5 on pages 140. Others, like weather, needed new categorisation. Comparing the attributes acquired from free elicitation and other sources it was established that six distinct attributes emanated from the former, 30 features

overlap with those elicited from the literature and 17 are common with those from the interviews.

Table 3.2 Blists Hill Victorian Town (attributes obtained from free elicitation)

| | **Attributes** |
|---|---|
| 1. | New entrance |
| 2. | Exhibits |
| 3. | Fascinating insight into Victorian life/ History and culture |
| 4. | Technology |
| 5. | Friendly staff |
| 6. | Good customer service |
| 7. | Facilities |
| 8. | Transport |
| 9. | Cost (price of admission) |
| 10. | Duration |
| 11. | Price of food drink |
| 12. | Cleanliness |
| 13. | Organisation |
| 14. | Experience |
| 15. | Group bonding |
| 16. | Lots of activities |
| 17. | Layout of the site |
| 18. | Calm atmosphere |
| 19. | Education |
| 20. | Interaction with staff |
| 21. | Staff with knowledge of their work |
| 22. | Opportunity to walk around |
| 23. | Size of site |
| 24. | Good for family day out |
| 25. | Authentic |
| 26. | Guided tour |
| 27. | Clean toilets |
| 28. | Entertainment |
| 29. | Signage |
| 30. | Interpretation |
| 31. | Health and safety |
| 32. | Ease of access |
| 33. | Weather condition |
| 34. | Healthy food option |
| 35. | Interactivities |
| 36. | Information |
| 37. | Shop |
| 38. | All exhibits were available to be seen |
| 39. | Costume and setting |
| 40. | Surrounding area |

Table 3.3 Alton Towers (attributes obtained from free elicitation)

| | Attributes |
|---|---|
| 1. | Price |
| 2. | Facilities |
| 3. | Rides |
| 4. | Weather |
| 5. | Opportunity to bond with family and friends |
| 6. | Transport |
| 7. | Cleanliness |
| 8. | Staff |
| 9. | Queue |
| 10. | Restaurant |
| 11. | Parking facilities |
| 12. | Gift shop |
| 13. | Hotel/accommodation |
| 14. | Food and drink |
| 15. | Something for everyone |
| 16. | Games |
| 17. | Entertainment |
| 18. | Lots to do |
| 19. | Information |

### *3.8.3 Content analysis of attractions' promotional material (website)*

The case attractions' promotional materials were also used as sources of identifying the attractions' attributes. This means is particularly useful in identifying specific characteristics, importantly, information regarding amenities considered by the operators as unique features of their attractions that contribute to the perception of quality. Information on the case attractions' websites were examined and content analysed to identify additional attributes (see Table3.4).

In the two cases the websites describe what each attraction offers to their visitors. A total of 14 attributes was recorded for Blists Hill Victorian Town whilst 22 was recorded for Alton Towers. For Blists Hill Victorian Town one

of the features “Fascinating insight into Victorian life/ History and culture” was site specific. On the other hand, four identified features for Alton Towers were found to be site specific. Overall, the process generated four distinct attributes not found in any of the three other sources of attribute generation.

Table 3.4 Attraction Attributes from Organisations’ Websites

| | Blists Hill | Alton Towers |
|---|---|---|
| 1. | Staff product knowledge | Interactivity |
| 2. | Use of technology | Information about prices |
| 3. | Ease of information | Escape |
| 4. | Warm welcome | Customers can have their say |
| 5. | Fascinating insight into Victorian life/ History and culture | Fun and entertainment |
| 6. | Opportunity to get involved | Something for everyone |
| 7. | Improved facilities | Exploration and adventure |
| 8. | Range of other activities/much to see and do | Unique experience |
| 9. | Prompt response to customers query/complaints | Novelty |
| 10. | A rage of merchandise including local items on sale | Contribution to the local community well-being |
| 11. | Information about prices | Availability of food and drink |
| 12. | Access for physically challenged | Availability of accommodation facilities |
| 13. | Education | Dedicated and devoted professionals |
| 14. | Fun and entertainment | Smoking point |
| 15. | | Medical centre |
| 16. | | Cash points |
| 17. | | Car parking |
| 18. | | Baby change and care |
| 19. | | Access for physically challenged |
| 20. | | Rides |
| 21. | | Ride photograph |
| 22. | | A range of shops |

The attributes extracted from all the aforementioned four sources were combined to form a total of 84 attributes (see Table 3.6) for both the Blists Hill Victorian Town and Alton Towers attractions. The attributes were subsequently used in constructing a performance scale in the quality evaluation

part of the main survey. A remarkable advantage of developing a service quality scale as described above is that the four areas utilised, in effect, will compensate the weakness of one another hence cover all the quality issues a visitor to an attraction may encounter.

An initial examination of the attributes generated from the four sources in Table 3.6 showed that without the assessment of the attractions promotional material attributes such as 'Access for physically challenged', 'Contribution to the local community well-being', 'Novelty', 'cash point' and 'Ride photograph' would have been missed. 'Access for physically challenged' was one of the highly rated attributes in the Access Dimension.

Table 3.5 Attributes and Literature Sources

| | Attributes | Literature search |
|---|---|---|
| 1. | Ease of access | Garrod and Fyall (2000), González *et al* (2007), McKercher *et al* (2004), O'Neill *et al* (1999), Rozman *et al.* (2009), Rivera *et al.* (2009). |
| 2. | Parking | Crompton (2003), González *et al* (2007), Kelley and Turley (2001), Mehmetoglu and Abelsen (2005), Nowacki (2009), O'Neill *et al* (1999), Rozman *et al.* (2009), Yuan and Jang (2008). |
| 3. | Cleanliness (general) | Crompton (2003), Frochot (2003)., González *et al* (2007), Kelley and Turley (2001), Mehmetoglu and Abelsen (2005), O'Neill *et al* (1999), Rozman *et al.* (2009), Rivera *et al.* (2009), Cole *et al* (2002). |
| 4. | Attitude of personnel to customer | Rozman *et al.* (2009). |
| 5. | Attitude of personnel to personnel | Rozman *et al.* (2009). |
| 6. | Taste of food | Rozman *et al.* (2009), Cole and Illum (2006). |
| 7. | Diversity of food & drinks | Frochot (2003), Mehmetoglu and Abelsen (2005), Nowacki (2009), O'Neill *et al* (1999), Rozman *et al.* (2009), Yuan and Jang (2008). |
| 8. | Uniqueness of experience | McKercher *et al* (2004). |

| | | |
|---|---|---|
| 9. | Ease of consumption | Frochot (2003), McKercher *et al* (2004). |
| 10. | Focus on 'edutainment' | McKercher *et al* (2004). |
| 11. | Position in the market | McKercher *et al* (2004), Mehmetoglu and Abelsen (2005). |
| 12. | Recreation | Garrod and Fyall (2000) |
| 13. | Relevance to visitors | Garrod and Fyall (2000), McKercher *et al* (2004). |
| 14. | Visually attractive and appealing | Mehmetoglu and Abelsen (2005). |
| 15. | Information desk with relevant information about the park | Nowacki (2009). |
| 16. | Modern looking equipment and facilities | González *et al* (2007). |
| 17. | Neat appearance of staff | González *et al* (2007), O'Neill *et al* (1999), Rozman *et al.* (2009). |
| 18. | Giving prompt services to the visitors | Frochot (2003), Mehmetoglu and Abelsen (2005). |
| 19. | Listening and providing accurate and correct information | Frocho (2003). |
| 20. | Willingness to assist visitors | Frochot (2003), González *et al* (2007), O'Neill *et al* (1999). |
| 21. | Responding to the visitors questions | Frochot (2003). |
| 22. | Informing the visitors about the organisation products | Frochot (2003). |
| 23. | Staff who are consistently courteous of visitors | Frochot (2003), Mehmetoglu and Abelsen (2005). |
| 24. | Convenient opening hours | Frochot (2003), Mehmetoglu and Abelsen (2005), Rozman *et al.* (2009). |
| 25. | Reasonable price (admission) | González *et al* (2007), Kelley and Turley (2001), Rivera *et al.* (2009), Yuan and Jang (2008). |
| 26. | Exhibits | Beeho and Prentice (1997), Nowacki (2009), Rivera *et al.* (2009). |
| 27. | Rides | Beeho and Prentice (1997), Nowacki (2009), Rivera *et al.* (2009). |
| 28. | Opportunities to get involved | Rivera *et al.* (2009). |
| 29. | Range of other activities/much to see and do | Beeho and Prentice (1997), Frochot (2003), Rivera *et al.* (2009). |
| 30. | Something for everybody | Rivera *et al.* (2009). |
| 31. | The use of technology | Rivera *et al.* (2009). |
| 32. | Variety of choice in the souvenir store | Frochot (2003), Mehmetoglu and Abelsen (2005), Nowacki (2009), O'Neill *et al* (1999), Rozman *et al.* (2009), Rivera *et al.* (2009), Cole and Illum (2006). |
| 33. | Placement and forming of the souvenir store | Mehmetoglu and Abelsen (2005). |
| 34. | Individual attention to customers | González *et al* (2007). |
| 35. | The staff treat you in a warm and friendly way | Crompton (2003), Frochot (2003)., González *et al* (2007). |
| 36. | Good reputation among general | González *et al* (2007). |

| | | |
|---|---|---|
| | public (good image) | |
| 37. | Facilities for access to complementary activities | González *et al* (2007). |
| 38. | Absence of mistakes in the performance of the service | González *et al* (2007). |
| 39. | Smoking area | Kelley and Turley (2001). |
| 40. | Cleanliness of the restrooms | Crompton (2003), Kelley and Turley (2001). |
| 41. | Opportunity to bond with family and friends | Cole and Illum (2006). |
| 42. | Totally guaranteed bookings | González,M. E. *et al* (2007). |
| 43. | Signage and direction | Crompton (2003), Frochot (2003), Nowacki (2009), O'Neill *et al* (1999). |
| 44. | Healthy food option | Rozman *et al.* (2009). |
| 45. | Surrounding area/spectacular and natural/built surroundings | Beeho and Prentice, (1997), González *et al* (2007). |
| 46. | Entertainment | Beeho and Prentice, (1997), Cole and Illum (2006), Yuan and Jang (2008). |
| 47. | Education | Beeho and Prentice, (1997), Garrod and Fyall (2000), Mehmetoglu and Abelsen (2005), Cole *et al* (2002), Cole and Illum (2006). |
| 48. | Authenticity | Frochot (2003). |
| 49. | Opportunity to walk around | Beeho and Prentice, (1997). |
| 50. | Staff with knowledge of their jobs/product | Frochot (2003), González *et al* (2007), O'Neill *et al* (1999), Yuan and Jang (2008). |
| 51. | Calm atmosphere/pleasant and relaxed atmosphere | Beeho and Prentice (1997). |
| 52. | Duration of activities | O'Neill *et al* (1999), Cole and Illum (2006). |
| 53. | Simple, welcoming decor | González *et al* (2007). |
| 54. | Availability of comfort amenities | Crompton (2003), Nowacki (2009), Cole *et al* (2002), Rivera *et al.* (2009), Cole and Illum (2006). |
| 55. | lived 'reality' in comparison to similar attraction | Beeho and Prentice (1997). |
| 56. | (not) Too commercialised | Beeho and Prentice (1997). |
| 57. | Feeling of safety at the attraction | Crompton (2003), O'Neill *et al* (1999). |
| 58. | Written leaflets provide enough information | Frochot (2003), Mehmetoglu and Abelsen (2005). |
| 59. | Consideration for less able visitors | Frochot (2003). |
| 60. | Price of food and beverage | Rivera *et al.* (2009), Cole and Illum (2006). |
| 61. | Interaction with personnel | Nowacki (2009), Rivera *et al.* (2009). |
| 62. | Enjoy re-enactments | Cole and Illum (2006). |
| 63. | Short waiting lines/queues | Yuan and Jang (2008). |
| 64. | Facilities for children are provided | Frochot (2003), Nowacki (2009). |
| 65. | Medical facilities | Kelley and Turley (2001). |
| 66. | Fascinating insight into Victorian life/ History and culture | Mehmetoglu and Abelsen (2005). |

Table 3.6 Attraction Attributes from Four Sources – Questionnaire, Interview, Literature and Organisations' Websites

| Attributes | Free elicitation | Interview | Academic literature | Companies' websites |
|---|---|---|---|---|
| Ease of access | √ | | √ | |
| Parking | | | √ | √ |
| Appealing and good condition physical facilities and equipment | √ | | | |
| Cleanliness | √ | √ | √ | |
| Attitude of personnel to customer | √ | | √ | |
| Attitude of personnel to personnel | | | √ | |
| Taste of food | | | √ | |
| Diversity of food & drinks | √ | | √ | √ |
| Uniqueness of experience | √ | √ | √ | |
| Ease of consumption | | | √ | |
| Focus on 'edutainment' | | | √ | |
| Position in the market | | √ | √ | |
| Recreation | | √ | √ | |
| Relevance to visitor | | | √ | |
| Visually attractive and appealing | √ | √ | √ | |
| Information desk with relevant information about the park | √ | | √ | |
| Modern looking equipment and facilities | √ | | √ | √ |
| Adequate transport systems | √ | | | √ |
| Access for physically challenged | | | | √ |
| Neat appearance of staff | | √ | √ | |
| Giving prompt services to the visitors | | | √ | |
| Listening and providing accurate and correct information | | | √ | |
| Willingness to assist visitors | | | √ | |
| Responding to the visitors questions | √ | | √ | |
| Informing the visitors about the organisation products | | | √ | |
| Adequate consideration for | √ | | | |

| | | | | |
|---|---|---|---|---|
| health and safety | | | | |
| Staff who are consistently courteous of visitors | | | √ | |
| Convenient opening hours | | | √ | |
| Reasonable price (admission) | √ | √ | √ | |
| Exhibits | √ | √ | √ | √ |
| Opportunities to get involved/interactivity | √ | | √ | √ |
| Range of other activities/much to see and do | √ | | √ | √ |
| Something for everybody | | √ | √ | √ |
| The use of technology | √ | √ | √ | √ |
| Variety of choice in the souvenir store | √ | | √ | |
| Placement and forming of the souvenir store | √ | | √ | |
| A range of shops | | | | √ |
| Individual attention to customers | | | √ | |
| The staff treat you in a warm and friendly way | | | √ | √ |
| Good reputation among general public (good image) | | √ | √ | |
| Facilities for access to complementary activities | | | √ | |
| Absence of mistakes in the performance of the service | | | √ | |
| Smoking area | | | √ | √ |
| Cleanliness of the restrooms | √ | √ | √ | |
| Opportunity to bond with family and friends | √ | √ | √ | |
| Totally guaranteed bookings | | | √ | |
| Signage and direction | √ | √ | √ | |
| Weather condition | √ | | | |
| Healthy food option | √ | | | |
| All exhibits were available to be seen | √ | | | |
| Costume and setting | √ | √ | | |
| Surrounding area/ spectacular and natural/built surroundings | √ | | √ | |
| Entertainment | √ | √ | √ | √ |
| Education | √ | √ | √ | √ |

| | | | | |
|---|---|---|---|---|
| Guided tour | √ | | | |
| Authenticity | √ | √ | √ | |
| Size of site | √ | √ | | |
| Opportunity to walk around | √ | √ | √ | |
| Staff with knowledge of their jobs/product | √ | | √ | √ |
| Calm atmosphere/pleasant and relaxed atmosphere | √ | | √ | |
| Layout of site | √ | | | |
| Duration of activities | √ | | √ | |
| Value for money | √ | √ | | |
| Simple, welcoming decor | √ | | √ | |
| Availability of comfort amenities | | | √ | |
| lived 'reality' in comparison to similar attraction | | | √ | |
| (not) Too commercialised | | | √ | |
| Feeling of safety at the attraction | | | √ | |
| Written leaflets provide enough information | | | √ | |
| Consideration for less able visitors | | | √ | |
| Price of food and beverage | √ | | √ | |
| Interaction with personnel | | | √ | |
| Enjoy re-enactments | | | √ | |
| Facilities for children are provided | | √ | √ | √ |
| Cash points | | | | √ |
| Rides | √ | √ | √ | √ |
| Ride photograph | | | | √ |
| Short waiting lines/queues | √ | | √ | |
| Fascinating insight into Victorian life/ History and culture | √ | | | √ |
| Novelty | | | | √ |
| Interpretation | √ | | | |
| Medical facilities | | | √ | √ |
| Contribution to the local community well-being | | | | √ |
| Availability of accommodation facilities/Hotel | √ | | | √ |

This preliminary perusal of the attributes yielded an interesting insight into how attraction operators undersell their products. It seems attraction marketers would need to emphasise more on the uniqueness of experience of their products and attributes visitors deem significant in contributing to their perception of attraction quality. Attractions would need to conduct context specific investigations in this area.

At this stage, it was necessary to refine and categorise the attributes even though an initial classification had been done employing template analysis in section 3.7. This is however necessary to check for dimensionality and possible overlap amongst both items and dimension. The researcher at this point regrouped the attributes into nine dimensions based on the literature (Beeho and Prentice, 1997; Gronroos, 1984 and Cole and Illum, 2006). The under-listed dimensions were derived.

**Amenities** – feature that enhance the physical and material comfort of the site.

**Employees** – this category relates to Gronroos (1984) '*How*' service is delivered. Rather than encapsulating the whole of Gronroos' (1984) Functional quality dimension, it focuses mainly on employees' performance, attitude and knowledge.

**Activities** – various dedicated and generalised pursuits undertaken by visitors at the site.

**Settings** – setting in which activities take place which could be social, environmental or managerial (Behoo and Prentice, 1997).

**Experience** – according to Behoo and Prentice (1997) this denotes the experiences gained for undertaking leisure activities within a given setting.

**Retail** – this include availability of catering services and gift/souvenir shops.

**Image** – according to Gronroos (1993) this refers to perception of visitors of the attraction organisation. Gronroos (1993) indicated that an organisation cannot hide behind the brand name as consumers see the organisation and its resources during the service encounter. Although Gronroos (1993) suggested that technical and functional quality are the most important aspect of the organisation that customers see hence other influencing factors are less important. When this statement is viewed in line with today's customer expectation vis-á-vis social responsibility particularly in theme park operations such as Alton Towers, then there is every indication not to take for granted that this view point is true. In light of this, the image dimension not only describe the perception of service but the way the public sees an organisation in terms of how responsibly it conduct its business and its position in the market.

**Price** – cost of admission, souvenir and food and beverages.

**Other** – this dimension does not fall into any of the above and has only one item in it – weather.

At the time of collation it was found that some attributes were repetition of an item or items already on the list or were not applicable to attraction context. Such attributes were deleted from the list. In a similar vein, during regrouping and after much reflection and re-examination of the generated attributes, items were moved to more suitable categories hence Table 3.7 was derived. The researcher was able to regroup, construct, and combine attributes identified in

preliminary research using the dimensions from past research along with their definitions.

Table 3.7 Categorisation of Attraction Quality Attributes before Expert Survey

| Category | Attributes |
|---|---|
| Amenities | Appealing and good condition physical facilities and equipment |
| | Parking |
| | Information desk with relevant information about the park |
| | Modern looking equipment and facilities |
| | Adequate transport systems |
| | Access for physically challenged |
| | Facilities for access to complementary activities |
| | Smoking area |
| | Signage and direction |
| | Simple, welcoming décor |
| | Availability of comfort amenities |
| | Written leaflets provide enough information |
| | Facilities for children are provided |
| | Ride photograph |
| | Cash points |
| | Medical facilities |
| | Availability of accommodation facilities/Hotel |
| Employees | Attitude of personnel to customer |
| | Attitude of personnel to personnel |
| | Neat appearance of staff |
| | Giving prompt services to the visitors |
| | Listening and providing accurate and correct information |
| | Willingness to assist visitors |
| | Responding to the visitors questions |
| | Informing the visitors about the organisation products |
| | Staff who are consistently courteous of visitors |
| | Individual attention to customers |
| | The staff treat you in a warm and friendly way |
| | Individual attention to customers |
| | Staff with knowledge of their jobs/product |
| Physical setting | Cleanliness (general) |
| | Visually attractive and appealing |
| | Opportunity to walk around |
| | Cleanliness of the restrooms |
| | Costume and setting |
| | Surrounding area/spectacular and natural/built surroundings |
| | Size of site |
| | Calm atmosphere/pleasant and relaxed atmosphere |
| | Layout of site |
| | Too commercialised |

| | |
|---|---|
| | (no) lived 'reality' in comparison to similar attraction |
| Retail | Taste of food |
| | Diversity of food & drinks |
| | Healthy food option |
| | Placement and forming of the souvenir store |
| | Variety of choice in the souvenir store |
| | A range of shops |
| Experience | Uniqueness of experience |
| | Ease of consumption |
| | Focus on 'edutainment' |
| | Something for everybody |
| | Absence of mistakes in the performance of the service |
| | Opportunity to bond with family and friends |
| | Totally guaranteed bookings |
| | All exhibits were available to be seen |
| | Education |
| | Ease of access |
| | Guided tour |
| | Authenticity |
| | The use of technology |
| | Convenient opening hours |
| | Adequate consideration for health and safety |
| | Entertainment |
| | Feeling of safety at the attraction |
| | Consideration for less able visitors |
| | Interaction with personnel |
| | Enjoy reenactments |
| | Fascinating insight into Victorian life/ History and culture |
| | Short waiting lines/queues |
| | Novelty |
| | Interpretation |
| Activities | Opportunities to get involved/interactivity |
| | Exhibits |
| | Rides |
| | Recreation |
| | Range of other activities/much to see and do |
| | Duration of activities |
| Image | Good reputation among general public (good image) |
| | Contribution to the local community well-being |
| | Position in the market |
| | Relevance to visitor |
| Price | Price of food and beverage |
| | Value for money |
| | Reasonable price (admission) |
| Others | Weather condition |

NB: The categories are developed based on Beeho and Prentice (1997), Gronroos (1993) and Cole, S and Illum, S.F. (2006)

Rossiter (2002) contends that pre-testing items for meaning is hardly conducted for marketing scales in academic research. To ensure that the items are easily comprehensible for the respondents a further refinement was deemed fit to make a final selection of fit for purpose items. To this end, a further step was taken to purify the pool of quality attributes accumulated – an expert opinion survey was undertaken.

### *3.8.4 Expert opinion survey*

Following the editing and categorisation of the attributes and in order to check whether they measure and represent the construct under examination, an expert opinion survey was conducted. A number of studies have used an expert opinion/judgement survey as a tool for refining attributes for scale development in both general services management (e.g. Sweeney and Soutar, 2001) and tourism and hospitality (e.g. Choi and Chu, 1999; Petrick, 2002; Caro and Garcia, 2008). The use of expert judgement is to ensure content and face validity (Hardesty and Bearden, 2004). A more detailed discussion of validity is provided in 3.12.

A myriad of judgement approaches can be found in the literature ranging from the evaluation of the degree of representativeness of an item within a construct domain to the assignment of an item to either an overall construct definition or a multifaceted construct (Hardesty and Bearden, 2004). In the evaluation of the degree of representativeness of individual items, judges may be requested to rate items as “clearly representative”, “somewhat representative” or “not

representative of the construct of interest" (Zaichkowsky, 1985 in Hardesty and Bearden, 2004). Hardesty and Bearden (2004) submit that regardless of the procedure employed, the researcher must decide which item to retain for further analysis. Developers of scales utilising expert judgement often adopt the technique for various reasons: deletion of ambiguous, redundant or unrelated item; evaluation of the quality of the survey; establishment of consensus on a subset of items to use in further analysis and partitioning of items into facets. This study made use of a hybrid approach, requesting the judges to delete ambiguous, redundant and unrelated item as well as classifying/reclassifying retained items.

The expert survey is not a probability but a judgement sample of individuals who have experience in a certain topic area and can provide valuable ideas and insight to the topic at hand (Churchill, 1997). In view of this, effort was concentrated on sampling individuals with requisite expertise and who were willing to participate, hence a convenience sampling approach was adopted. Recognising the strengths and weaknesses of convenience sampling as stated in sub-section 3.8.2.1, Lincoln and Guba's (1985) four criteria - 'credibility', 'transferability', 'dependability' and 'confirmability' against which the validity, generalisability, and reliability of qualitative research can be tested - were applied in this process (see detailed discussion in section 3.9.6). Again, since this process aims to establish the representativeness of the generated attributes and their dimensions of service quality in attractions, six experts in services marketing and visitor attraction management were invited to take part in the refining of the initial 84 items to ensure face and content validity of the

scale. The individuals invited to participate in this process by default fell into two geographic categories: UK and international academics. After the initial contact, only four of experts responded.

A number of item deletion/retention rules have been identified by Hardesty and Bearden (2004) when researchers employ expert judgement; these include:

1. Deletion when items evaluated were judged by any expert as being poor indicators of the construct domain.
2. Overall evaluation of an item by a proportion of all the judges as "somewhat representative".
3. Overall evaluation of an item by a proportion of all the judges as "completely representative".

In 2 and 3 above, a cut-off point may be established as a percentage (e.g. 70%) or number (e.g. two out of three) of experts based on either criterion. Similarly, researchers will employ rules where items are requested to be grouped or classified into dimensions. Usually, a cut-off (percentage or actual number) will be set, for instance, requiring that at least the established number of judges classify an item under the same dimension. Adopting similar criteria employed by Lee and Crompton (1992), a set of rules were established for the basis of rejection or retention of attributes or dimensions. An item was to be discarded if two or more of the four experts queried its inclusion. Similarly, a dimension was to be deleted if 50% of the experts rejected it.

A procedure somewhat similar to Zaichkowsky's (1985 in Hardesty and Bearden, 2004) was employed in this study by requesting that the experts accept or reject and provide a brief justification of retention/rejection and/or reclassification of items where they felt the item was not under an appropriate dimension. The experts were given the operational definitions of the nine dimensions of service quality in a visitor attraction as initially conceptualised. The process resulted in three categories (Price, Image and Other) and their corresponding attributes being eliminated. Price was not accepted as part of the service quality dimension by 75% of the experts, which is in accordance with what is obtainable in the literature. In line with the view of the experts, Dabholkar *et al.,* (1996) submitted that price is not part of the generally accepted attributes of service quality; to this end, price was eliminated from the set. The literature clearly suggests that price is a determinant of service value (see Zeithaml, 1988). Sanchez et al (2006) argued that price and quality are functional sub-factors that contribute separately to value and should be measured separately. In the same vein, image and other (weather) categories were also rejected as dimensions of service quality. The experts had other observations concerning wording and the context of the generated attributes and conceptual dimensions which resulted in rewording/rephrasing of some of the items. Thus, the number of conceptual dimensions that constitute service quality in visitor attractions was reduced from nine to five: amenities, staff attributes, physical setting attributes, retail and experience. In the end, 42 attributes remained for Alton Towers and 48 for Blists Hill Victorian Town (Table 3.8).

Table 3.8 Categorisation of Attraction Quality Attributes after Expert Survey

| Category | Attributes |
|---|---|
| Amenities | Working condition of physical facilities and equipment |
| | Parking facilities |
| | Information provided at the front desk about the attraction |
| | Transport services to the site |
| | Access for physically challenged to most part of the site |
| | Smoking area |
| | Effectiveness of signage and direction within the site |
| | Availability of toilets |
| | Effectiveness of written leaflets in providing enough information about the site and facilities |
| | Facilities at the children's play area |
| | Ride photograph |
| | Cash points |
| | Medical facilities |
| Employees | Appearance of staff (Neatness) |
| | Promptness of services to visitors |
| | Staff's ability to provide accurate and correct information |
| | Treatment of visitors in a warm and friendly way by staff members |
| | Staff's knowledge of product |
| Physical setting | General cleanliness |
| | Visually attractiveness and appeal |
| | Ease of getting around within the site |
| | Cleanliness of the restrooms |
| | Spectacular nature of the natural/built surroundings |
| | The surroundings/atmosphere (pleasant and relaxing nature) |
| Retail | Quality of food on the site |
| | Diversity of food & drinks |
| | Availability of healthy food options |
| | Access to souvenir store |
| | Variety of choice in the souvenir store |
| | Availability of a range of shops |
| Experience | Availability of something for everybody |
| | Opportunity to bond with family and friends |
| | Bookings |
| | Opportunity to learn (Education) |
| | The use of technology |
| | Information on opening hours |
| | Consideration for health and safety |
| | Entertainment |
| | Management of waiting lines/queues are well managed |
| | Novelty |
| | Opportunities to get involved/interactivity |
| | Opportunity for recreation |
| | Range of activities (much to see and do) |

| | |
|---|---|
| | Duration of activities |
| | Costume and setting |
| | Availability of all exhibits |
| | Narration and explanation of guides and interpreters |
| | Authenticity of the experience |
| | Insight into Victorian life/ History and culture |
| | Clarity of written interpretation |
| | Physical state of the exhibits |
| | Quality of ride photograph |
| | Efficiency in the way ticket is sold/delivery |
| | Rides |

## 3.9 The second phase

The main objective of the second phase of this research was to evaluate the robustness of the scale intended to measure perceive quality of the case attractions and subsequently examine the relationship of perceive quality with perceived value, satisfaction and behavioral intentions. The procedure involved a number of steps comprising of questionnaire design, pre-testing of the questionnaire, determination and implementation of sampling approach, questionnaire administration and preparation of data for analysis. The following sub-sections offer detailed explanation of the quantitative data collection that informed the testing of the formulated hypotheses and conceptual framework.

### *3.9.1 The questionnaire survey*

One of the principal challenges for researchers in all subject areas, including tourism, is to identify an accurate, reliable and easy-to-use data collecting instrument. In tourism studies, questionnaires are mostly employed in gathering data because of their ability to collect large sample sizes for

statistical analysis (Orams and Page, 2000). Tourism and particularly visitation to attraction encompass a wide range of activities, with a range of characteristics, such as frequency, duration and type of participants, expenditure, location and level of enjoyment. While qualitative methods are ideal for exploring attitudes, meanings and perceptions on an individual basis, questionnaire methods provide the means to gather and record information on the incidence of attitudes, meanings and perceptions among the population as a whole.

There is a variation in questionnaire survey design depending on who is completing it or the platform through which it reaches the subjects. Questionnaires can either be interviewer-completed or respondent-completed. Further to this, questionnaires are traditionally distributed through post or personally by the researcher and/or research assistant(s). In recent times the use of the internet as a platform for delivering questionnaires has gained popularity; this has been enhanced with commercial organisations offering online survey tools that have wide raging capabilities. Such capabilities can help simplify questionnaire completion and may incorporate functions such as 'filters', which allow respondents to bypass questions not relevant to them; some incorporate features that allow respondents to proceed only if they answer relevant questions.

In order to address this study's research questions and objectives, a structured, self-complete e-questionnaire survey was used (see Appendix 3). Respondents were asked to complete a number of questions relating to the performance of

the attractions (quality attributes), perceived value, satisfaction and future behavioural intention in terms of word of mouth recommendation and repeat visitation. Perceived value, satisfaction and behavioural intention were measured using pre-validated items (see sub-section 3.8.2.1 for details). Veal (2006) identifies two main formats in which e-surveys can be administered. 1) By e-mail where a letter of request and copy of the questionnaire are sent as an attachment to respondents. The respondent can choose to print a copy, complete and send through the post or complete as a Word document and return it as an attachment via email. 2) The second format is the full electronic version, where the respondent is expected to log onto a specific internet site to complete the survey online. This format has the advantage of delivering the data to the researcher in electronic form that can be instantly analysed using matching software (Veal, 2006). The latter format was used in this study.

Completing an online questionnaire is quite informal and relaxed, and can be done in the comfort of a respondent's living room (Preece *et al.*, 2007). This is a significant advantage in attractions research because industry operators/mangers seldom allow questionnaire administration on their premises as they believe it detracts from the experience of visitors. Moreover, visitors may rush the completion of the questionnaire to return to their leisure activity at their earliest opportunity and in doing so may omit vital information and/or provide unreliable data.

Saunders *et al.*, (2007) point out that the use of an internet mediated questionnaire survey will ensure high confidence that the right person has

responded and that the likelihood of contamination of a subject's response is minimised. The likely response rate varies from 30% within organisations (intranet) to 11% using internet (Saunders *et al.*, 2007).

Apart from assisting in collecting large amount of data, questionnaire surveys are an effective and economic way of data collection. In order to capture how visitors to attractions evaluate quality and the relationship of quality with value, satisfaction and behavioural intention, it is imperative that an instrument that is capable of gathering data effectively in these areas is designed and implemented.

### *3.9.2 Questionnaire design*

Maintaining a focus on the research aims and objectives and careful planning are probably the key elements to successful questionnaire design. Designing a questionnaire can be an onerous process which needs to be cautiously thought through. It requires methodological competence and experience in question formulation technique in order to gather data that will produce accurate results (Sarantakos, 1998). To this end, it is essential that the investigator is clear about the data required and that questions aimed at obtaining the data are designed clearly so that respondents understand them in the same way the investigator intended. In turn, the answers provided must be capable of being interpreted by the investigator as intended by the respondents. The internal validity and reliability of any given data and the response rate achieved depend largely on the design of questions, the structure of the questionnaire and the quality of pilot testing (Saunders *et al.*, 2007). The implication here is that an

ill-designed and incorrectly administered questionnaire is most likely to produce inconsistent and defective data. Veal (2006) outlines the process for designing valid and reliable questionnaire (see Figure 3.6). In addition, a number of guidelines for devising effective questionnaires can be found in the literature. Walliman (2011) considers them simple rules that are difficult to carry out perfectly. The rules include:

1. Identification and determination of method of assessment of the variables for which data is to be gathered. This will enable the researcher to formulate list of information requirement (Veal, 2006) or data requirement table (Saunders *et al.*, 2007);
2. The language used must be clear and unambiguous;
3. Questions must be kept simple to enhance response rate;
4. The questionnaire layout;
5. Clear and professional presentation.

Some of these points are further explore in the chapter in sections 3.9.2.5 and 3.9.2.6.

Bearing all these in mind, the researcher carefully designed questionnaires (one for each case attraction) that made use of data collected in the first phase qualitative researcher coupled with exploration of service value, satisfaction and behavioural intentions literature. The service value, satisfaction and behavioural intentions literature was explored to identify and choose items suitable for the measurement of the three constructs.

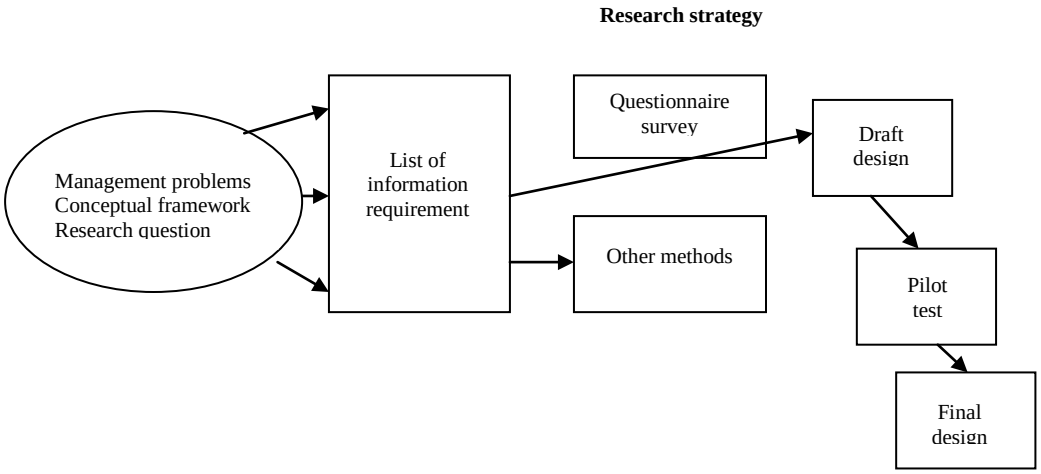


Figure 3.6 Questionnaire Design Process Source: Veal (2006)

### *3.9.2.1 Initial consideration*

It is important that the researcher revisits the specific objectives of the study before dealing with the practical issues relating to questionnaire design because the research aims and objectives dictate the nature and type of questions to be asked (Wilson, 2003; Veal, 2006). Taking into consideration the aims, research questions, objectives and hypotheses of this present study, it became inevitable that the questionnaire combined pre-validated items of perceived value, satisfaction and behavioural intentions with the service quality construct developed from the literature review and front end qualitative research.

Perceived value was measured using items used by Sweeney and Soutar (2001), Bello and Etzel (1985) and Weber (2001). Satisfaction was measured using a multi-item scale adapted from Oliver's (1997) universal scale and behavioural intention was measured using items adapted from Baker and Crompton (2000); Brady, Cronin and Brand (2002); Lee *et al* (2007) and Zabka *et al* (2010). Creswell (2009) warns that when pre-validated items are modified or combined, the original validity and reliability may not hold for the

new instrument; in light of this, it was borne in mind that validity and reliability of the modified items such as value, satisfaction and behavioural intention would have to be re-established.

#### *3.9.2.2 Question types*

Another important decision that was taken at the initial stage of the design of the research instrument was to determine the type of question to be included. Altinay and Paraskevas (2008) contend that there are four types of questions – close, open, open response-option and rating/scale questions; and that in most cases, a questionnaire will comprise all the four types because some types have been proven to be more effective in extracting specific kind of questions. Principally in the literature two main types are often quoted: open (open-ended) and closed (close-ended; forced-choice) questions. Often other types, including open response-option and rating/scale questions, are classed as closed questions.

Open questions allow subjects to provide responses in a free manner without hindrance to the direction or scope of their answers. They are widely used in in-depth and semi-structured interviews and can be used in questionnaires in exploratory studies where detailed answer or the need to know what is uppermost in respondents' attitude or opinion is desirable. In contrast, closed questions offer respondents choices of answers from which they can select one or more options depending on the researcher's instruction. In essence they are forced to make a choice (de Vanus, 2000).

The use of open-ended questions is valuable because answers are not inclined to be influenced by the wording of questionnaire. Also, verbatim responses from subjects can offer a variety of rich data which might have been hidden by categorisation or pre-coding exercises (Saunders, *et al.,* 2007). However, Altinay and Paraskevas (2008) warn that these should be used in questionnaire surveys with caution as their overuse can result in respondent fatigue. In addition to this, open-ended questions may provoke low response rates because they require a longer time to complete and people may not have enough time to provide free-form answers (Veal, 2006). Veal, (2006) also points out that on the part of the researcher, open questions may be laborious to analyse and may eventually generate a set of categories of equal value with a well-constructed pre-coded list.

One of the criticisms of close ended questions is that they have the tendency of creating more bias than open questions. Reja *et al.* (2003) note that researchers when wording questions, can include their bias therefore influence the direction of the research and consequently the outcome. However, close-ended questions can be immensely valuable if the researcher takes time to generate well-constructed questions. Close questions are quicker and easier to answer because they require minimal writing (Saunders *et al.,* 2007). In the same vein, where rigorous statistical analysis of data collected is required, it has been argued that they are more meaningful to analyse in contrast to open questions which cannot generate useful data because of difficulty of coding and creating categories (Orams and Page, 2000). As enumerated above, the disadvantage and advantages of the two main question types are obvious. It is pertinent to

note that ease or difficulty in implementing one of the two approaches might not be the ultimate factor that determines a researcher's choice. The decision as to the question type to use is dependent on the question being asked and the type of data to be gathered and the ability of the respondents to answer them.

Support for the use of the two (or four in the case of Altinay and Paraskevas, 2008) types of questions in one questionnaire survey can be found in the literature. In order to counteract the weaknesses of each question type, the instruments used in this study included open, closed and rating/scale questions. Hussey and Hussey (1997) and Sarantako (1998) believe that combining close-ended and open-ended questions is beneficial because the research will be combining the benefits of each question type thereby neutralising the weaknesses of individual question type to develop a stronger research instrument. The majority of the questions included in the questionnaires for this study were predominantly structured close-ended rating/scale questions directed at collecting data relating to service purchase attitude and behaviour.

In addition, socio-demographic information was collected using closed questions. Open-ended questions, in addition to close-ended questions, were used to elicit information regarding the attraction features the visitors either liked or disliked most at the attractions visited. Open questions were included to capture any attraction attribute that might have eluded the scale development stage in the first place and to determine the most important attributes to the visitor and to subsequently examine how these impact on the other service constructs under investigation.

### *3.9.2.3 Scale point propagation*

It is posited that respondents engaging with attitude-based questionnaires go through four stages: a) interpreting the items, b) retrieving pertinent beliefs and feelings, c) rendering a judgment based on the beliefs and feelings and d) selecting a response (Tourangeau and Rasinski, 1988). Researchers have a wide range of choices when it comes to decision on which scale to use to gather data on respondent beliefs and attitude. To allow for clear communication to the respondents Field (2009) cautions that the distance on the scale must be equal at all points along the scale. Moreover, good measurement is achieved when the properties of the scale used are consistent with the construct(s) being measured.

Opinions on the use of scale points in attitude studies are quite varied. For this reason, a myriad of scale points are employed and this can be very confusing as different researchers prefer to use different calibration with limited justification (Wilson, 2003). In selecting any given scale, particularly to measure attitude based concepts like perceived quality, it should be noted that each has its merits and flaws. Wilson (2003) argues that a scale with more than five intervals is capable of creating difficulty because it can be intricate to find appropriate words to describe all the points on the scales. Also small differences between options can confuse respondents who may result to trial and error if the exercise is too tasking (Tourangeau and Rasinski, 1988). Offering respondents with a smaller amount of significant response choices, in contrast to providing a larger quantity of options can lead to greater validity

(Viswanathan *et al*. 2004). Frary (2001) notes that psychometric research has shown that most respondents cannot reliably distinguish more than six or seven levels of response and that most of the score variance is due to direction of choice rather than intensity of choice. However, on the other hand it can be argued that providing more intervals on a scale will aid respondents' understanding of the fine distinction between alternatives hence will be able to choose appropriate option.

Frary (2001) recommends that a four to five scale point measurement is adequate to generate a reasonably reliable indication of response direction since a large proportion of item-score discrepancy is a product of direction of choice rather than choice intensity. To this end, five points Likert and Likert-type scales were employed in this study to measure attraction attribute performance, perceived value, satisfaction and behavioural intentions. Details relating to respondents' socio-demographic characteristics, which are nominal in nature, were also obtained but these were classified according to their mutually exclusive subclasses. The attractions' quality attributes were measured on five point performance scales ranging from 1 representing 'Very Poor' to 5 'Very Good'. Perceived value and visitor satisfaction were measured on five point Likert scale with 1 representing Strongly Disagree' and 5 being 'Strongly Agree'. Behavioural intentions were measure on Likert-like scale of 1 being 'Extremely Unlikely' and 5 representing 'Extremely Likely'. A mid of 'Neither...' is applicable to all the scales. In addition, applicable to all the scales is a stand-alone 'Don't Know' option.

### *3.9.2.4 The 'Don't know' option*

Hawkins and Tull (1993) point out that the issue of 'uninformed' respondent is rampant in marketing research. It is possible that sometimes respondents never know the answer to a specific question they get asked. This may be due to the fact that they have never consumed or experienced the product in question before. Normally an attraction will have many sections, facilities and services, which sometime a visitor may not have had the opportunity to fully explore at any one visit. In this case the respondents are not likely to possess the requisite knowledge or opinion that will enable them to provide appropriate response, a situation which may force them to provide false answers. In theory the inclusion of a 'Don't know' option on a scale is likely to give respondents assurance that it is not necessary to have answer to every question and this is likely to helps discourage guessing (Hawkins and Tull, 1993). For this reason the 'Don't know' option was included on the scale in this study as Ryan and Garland (1999) stated that the 'Don't know' option ensures the reliability of the acquired data because the respondents do not feel compelled to choose an option when they did not have a valid answer or opinion

### *3 9.2.5 Wording of questions*

Altinay and Paraskevas (2008) see questionnaire design as a communication process where the investigator has to obtain desired information from a wide range of people who must be asked questions they understand. Of particular importance is the recognition of the population for whom the questionnaire is designed. The profiles of attraction visitors are quite varied in terms of educational attainment, cultural background and exposure to questionnaire. For

this reason choosing the right word is essential since words often have different meanings to different people. Clear wording of questions with the use of terminologies the respondents understand and are familiar with is likely to enhance validity (Saunders *et al.,* 2007). Researchers must take into account the vocabulary skills of the anticipated respondents. As with most surveys, the capability of respondents to answer questions before the distribution of the questionnaire is difficult to ascertain. To this end Veal (2006) suggests that in wording the questions for a questionnaire the researcher should:

- Avoid the use of jargons in questions;
- Simplify the question/word used wherever possible;
- Avoid ambiguity;
- Avoid leading questions;
- Avoid multiple-questions-in-one question – an item must deal with only one question at a time.

Taking the above into consideration in this study, the use of jargon and complicated terminologies was completely avoided by using basic everyday English without compromising the information solicited from participants. It was also ensured that each question addressed one issue at a time thereby avoiding double-barrelled questions which can prevent respondents from understanding the issue to be addressed (Wilson, 2003). The expert opinion survey and pilot test (see 3.8.2.8) played a major role in ensuring that questions were properly worded, were not leading and that individual questions did not have multiple meanings.

### *3.9.2.6 The questionnaire layout*

The layout of a questionnaire survey is a key consideration a researcher must bear in mind. In designing the research instrument for this study, and to ensure that respondents easily understand and complete the survey effectively the layout, length, sequence of question and overall presentation were carefully considered.

Frary (2002) notes that there is sparse research on the effect of clearly printed and well laid out questionnaire on response rate but however opine that an attractive questionnaire will likely stimulate better response. Frary (2002) further notes that experienced researchers will be inclined to place considerable emphasis on extrinsic characteristics of questionnaires. In similar vein Saunders *et al.,* (2007) argue that it is advisable for a survey form to be attractive in order to encourage respondent to fill and return it. The questionnaire used in this study did not suffer appearance problem because an online software tool, Surveyor, which has a number of style templates for type-faces and colour, was utilised.

In addition to appearance, the sequence of questions is another factor in questionnaire design. It has been argued that respondents will find it relatively easier to answer questions and complete a survey form if the questions build progressively (Hague, 1993; Sarantakos, 1998; Saunders *et al.,* 2007). Evidence indicates that dividing questions logically into topics will aid subjects through the questionnaire completion process (Hague, 1993). Based on the above argument, related items were grouped into sections. As there was no

reason for general questions such as the number of visit to the attraction the questionnaire started with questions on the attraction's attribute performance. Inclusion of a warm-up questions as suggested by Leones (1998) would have increased the length of the questionnaire unnecessarily. It was ensured that questions flowed logically (Hague, 1993; Sarantakos, 1998). Personal and questions of sensitive nature were placed towards the end of the questionnaire as Frary (2002) indicates that placing such questions at the beginning may discourage respondents from completing the questionnaire. The questionnaire (see Appendix 3) included eight matrix questions presented on Likert scales, three free text questions and four multiple choice questions. A basic protocol was that the questionnaire was easy to understand and quick to complete.

The first five matrix questions were designed to gather information on the perceived quality of the attractions. Specifically, the five questions enquired about the performance of the attractions' attributes. The respondents were asked to rate the attributes performance on a Likert-type scales ranging from 1 representing 'very poor' to 5 'very good'. 0 represented 'Don't Know'. Question 1 was 'rate Alton Towers [Blists Hill Victorian Town] on the following Amenity Attributes using the range of options provided'. Question 2 was 'rate Alton Towers [Blists Hill Victorian Town] on the following Staff Attributes using the range of options provided'. Question 3 was 'rate Alton Tower [Blists Hill Victorian Town] on the following Physical Setting Attributes using the range of options provided'. Question 4 gathered information on the case attractions' retail attributes by asking respondents to 'rate Alton Towers [Blists Hill Victorian Town] on the following Retail

Attributes using the range of options provided'. Finally on attraction attributes, question 5 was: 'rate Alton Towers [Blists Hill Victorian Town] on the following Experience Attributes using the range of options provided'

Questions 6 and 7 were free text open questions designed to explore in depth the respondents' view on what they consider the best feature of the attraction or their least favourite feature. They were requested to provide a brief rationale for their answer.

The last three matrix questions measured perceived value, visitor satisfaction and behavioural intentions. Question 8 was designed to examine the respondents' level of agreement with 10 perceived value items. They were requested to indicate their level of agreement with the ten items on a 5 point Likert scale labelled 'Strongly Disagree', 'Disagree', 'Neither Agree Nor Disagree', 'Agree', 'Strongly Agree' and 'Don't Know'. Question 9 explored satisfaction on the same scale as perceived value with four items derived from the literature. Visitor satisfaction was measured using a multi-item scale adapted from Oliver's (1997) universal scale. Similarly, question 10 used three items derived from the literature to measure behavioural intentions on a Likert-like scale labelled 'Extremely Unlikely', 'Unlikely', 'Neither Unlikely Nor Likely', 'Likely', Extremely Likely' and 'Don't Know'. Behavioural intentions was measured employing measures similar to Baker and Crompton (2000); Brady, Cronin and Brand (2002); Lee, Petrick and Crompton (2007) and Zabka, Brencic, and Dmitrovic's (2010) comprising items relating to loyalty, repeat visits and recommendations.

The four multiple choice questions dealt with socio-demographic characteristics of the participants. Question 11 was 'Who were you with?' Question 12 was 'How many people were in your group?' question 13 was 'What is your gender?' and question 14 being 'What is your age group?' The last question was a free text type eliciting respondent occupation.

The characteristics of items and sections in the two questionnaires constructed for this study and their subsequent structuring emanated from the review of the pertinent literature, an analysis of an initial interviews with a cross-section of attraction visitors and an evaluation of data from freely elicited opinions of a group of first year university students who had been to the two case attractions.

In addition, a content analysis of the case attractions' promotional material (website) and an expert opinion survey were also used. The contents and framing of each question, the choice format, the arrangement of individual questions in each section and the layout and overall structure of the questionnaires were carefully considered. This was done to reduce measurement error to an acceptable level, collect reliable information for data analysis and to effectively test the research hypotheses and address the overall aims and objectives of the study.

Having followed necessary procedures in constructing the questionnaires used in this study as enumerated above, the need to get them ready for fieldwork in order to discover how respondents interpret the questions (Altinay and

Paraskevas, 2008) became a crucial step to take as pre-testing an instrument before the actual data collection exercise is as vital as framing questions hence; an essential part of the methodological procedure (Finn *et al.*, 2000).

#### *3.9.2.7 Pilot testing of the questionnaire*

A pilot survey is very important because it is difficult to predict respondents' interpretation and reaction to questions and more so it helps in refining and correcting questions (Gill and Johnson, 1997). Piloting allows the researcher to understand whether the questions asked are effective enough to sustain analysis; ascertain that the participants are able to understand what is being asked; and gain ideas from the way respondents reply to the questions. In essence piloting does not only examine the suitability of the questionnaire for achieving desired outcomes, it affords the researcher the opportunity to identify possible design or content weaknesses as well as proffer alternatives to how questions should be reworded (Altinay and Paraskevas, 2008). In summary piloting helps the researcher to ascertain that the questionnaire is well designed as it tests the reliability and validity of the questionnaire; if the questions are not suitable or difficult to understand, then unreliable data will be collected and in turn undependable results generated (Finn *et al.*, 2000).

Giving heed to the foregoing arguments, a pilot survey was conducted in March/April 2011 in order to test the instrument design. A sub-sample of respondents of similar characteristics to the identified main sample was surveyed. A convenience sample with respondents similar in profile to the respondents of the interview in sub-section 3.8.1 (see Table 3.1 as an additional

aid) was drawn. A total of 24 individuals, whom the researcher confirmed had visited one or both of the case attractions, were emailed with a request to take part in the pilot research. To confirm the respondent had visited the either of the case attractions before a sieving question of 'Have you visited either Alton Towers or Blists Hill Victorian Town in the past one year?' was asked.

The email contained two hyperlinks which the respondents were implored to click in order to visit the questionnaire websites and subsequently complete the questionnaires as applicable. The respondents in addition to answering the questions were requested to check for clarity/ambiguity and to note their observations and comments in a word document which should be sent to the researcher as attachment to an email. Their feedback was requested to get to the researcher by Friday the 8$^{th}$ of April 2011 making the pilot test a two week exercise. A total of 15 people replied to the email with comments and observations which were valuable in identifying errors in the questionnaire content.

The pilot study found some scope for change within the questionnaire. Firstly, majority of the respondents (87%) found the attraction attribute matrix too long (see appendix 2 – the questionnaire before piloting) and capable of discouraging respondents from completing the questionnaire. In view of this opinion, the matrix was then broken down to five sections based on the identified attraction quality attribute dimensions. In addition, it was also found that the alternatives the respondents had to choose from under the item 'Who were you with?' was not exhaustive. An important option relating to 'being

with family' was omitted, this was however included in the revised questionnaire. Other minor presentation errors identified were corrected before arriving at the final version of the questionnaire which was subsequently administered. This is presented in Appendix 3.

### *3.9.3 The target populations and samples*

For this study, there were two distinct target populations. The two visitor attractions were chosen based on the fact they offer an extensive attraction service. Also two different types of attractions were chosen to assess whether the model formulated is applicable to a variety of settings. A population refers to the total set of people a sample represents. Hawkins and Tull (1993) point out that it is important to establish clearly what the population of an intended study is in terms of elements, sampling unit (basic unit containing the element of the population), extent (geographical location of the population) and time (time at which study is completed). Employing these criteria, the populations under investigation in this study can be defined as follows:

*Element* – all visitors (domestic and international leisure visitors)

*Sampling unit* – who have visited the Alton Towers and/or Blists Hill Victoria Town sites within one year

*Extent* – online attraction forums/university and colleges and onsite Blists Hill Victorian Town

*Time* – during the period June to December 2011

For any type of research, the technique for sampling is very crucial. A carefully planned sample survey will produce useful and reliable result. Sampling is one of the most significant indicators of the quality of data collected in a given survey. It is the process through which a researcher plans and obtains necessary data. In essence it can be defined as a process of selecting participants for a piece of research. The aim is to have an ideal survey where errors are reduced to the minimum, members of the population that have equal chance of being selected in a representative large sample are included with no record of non-response. Surveys, irrespective of mode of distribution, rarely achieve this type of conditions perfectly (Sill and Song, 2002). It is safe to conclude that including every person or potential item in a survey or research study is neither feasible nor effective particularly in visitor attraction survey. This explains why most survey research involves sampling of some kind. Sampling to this end is the means by which *sample*, or a portion of a survey population is obtained.

However, every survey that does not include all the entire members of a population, for instance as in a census, is prone to sampling error (Leones, 1998). Leones, (1998) identifies the following types of sampling errors: coverage, measurement and nonresponse errors. Coverage error occurs when all the sub-groups in the population are not reached. In visitor survey, coverage error may result from collection of data at a particular period or season (peak or low). Tourism products and particularly attractions are notorious for their fluctuating demand. It must be noted that demand in tourism is characterised by four main dimensions - trend, seasonal, cyclical and random dimensions.

Measurement error on the other hand arises when responses are not accurate or sufficient to answer the question asked. The third type of error, the nonresponse error, occurs when a particular sub-set of the population did not respond.

Sampling techniques are closely associated with, but not limited to, quantitative methods such as the survey and the experiment. In most cases, the purpose of taking a sample is to generalise to the survey population and the characteristics of the sample are used as estimates of the parameters of the population. To this end, the two most crucial and interrelated evaluative criteria when sampling for generalizability are reliability and representativeness (Finn *et al.*, 2000).

A representative sample denotes one that is selected on the basis of sound methodological principles and mirrors the profile of the target population (Ryan, 1995). In order to achieve sample representativeness and minimise sampling error, visitor numbers and profile to both attractions were sought. Gobo (2004) advocates that issues of sampling, representativeness and generalizability must be approached in a practical and realistic manner, suggesting a departure from abstract submissions that make methodological principles and rules operate in isolation of practice. In order to obtain representativeness, Gobo (2004) observes that the sampling process should take into cognisance the field incidents, contingencies and discoveries.

### *3.9.3.1 Sample size determination*

To avoid coverage error it is also essential to determine the size of the population in order to decide on whether the whole population will be surveyed (census) or a proportion (sample) of it will be required for survey. To gain an insight into visitor numbers to the two case attractions, a desk research was conducted examining the case organisations' promotional materials and relevant industry/trade journals and updates.

According to The Sentinel (2009) 2.5 million visitors were admitted to Alton Towers in 2008. It is also estimated that 300,000 people visit the Iron Bridge Gorge Museums yearly (The Ironbridge Gorge Museums, no date). Whilst this figure represents the number of visitors to all the Iron Bridge Gorge Museums, it should be noted that Blists Hill Victorian Town is the largest attraction amongst the Iron Bridge Gorge Museums portfolio, therefore there is a high probability of visitation. Due to the large number of visitors to these two attractions, a complete enumeration of the population was not feasible. To this extent, a sample was required.

The following formula for 'known population size' was therefore used in calculating the number of respondents that will be included in the sample.

$$n = [(z^2 * p * q)+ME^2] / [ ME^2 + [z^2 * p*q / N]$$

Where:

n = sample size

N = population size

z = confidence coefficient

ME = margin of error

*p* = estimated proportion of an attribute present in the population

*q* = 1 - *p*

The *z* value for a confidence level of 95% is 1.96 (Saunders *et al.*, 2007; Gilbert *et al.*, 2009)

5% allowable error = 0.05

*p* is assume to be 0.5 to provide maximum variability

Alton Towers

n = [(3.8416* 0.5 * 0.5) + 0.0025] / [0.0025 + [3.8416 * 0.5*0.5 / 2500000]

n = (0.9604 + 0.0025) / (0.0025 + 0.00000038) = 385.10

Blists Hill Victorian Town

n = [(3.8416* 0.5 * 0.5) + 0.0025] / [0.0025 + [3.8416 * 0.5*0.5 / 300000]

n = (0.9604 + 0.0025) / (0.0025 + 0.00000038) = 384.67

Based on the above calculation a total of 770 subjects should be sampled; 385 from each attraction site. This figure obtained from the calculation is similar to Saunders *et al*'s (2007) suggested 384 for 10,000,000 population size at a 95% level of confidence assuming data are collected from all cases in the sample. Saunders *et al* (2007) also support the notion of larger sample size facilitating

the likelihood of reducing variance error in comparison with the target population.

#### *3.9.3.2 Sample type*

There are two major kinds of sampling technique: probability (or probabilistic) and non-probability (or non-probabilistic) sampling techniques. Probability sampling is characterised by random selection of individual element with known chance of being selected in a population. Each item within the population, often but not always, has equal chance of being selected. There are different types of probability sampling and the often cited techniques are simple random sampling, systematic sampling, stratified sampling, and clustering sampling. The simple random sampling needs and uses a table of random numbers, stratified sampling methods divide the population into homogeneous, mutually exclusive groups like age, gender, or market segment and cluster sampling requires a very large population or one that is geographically diverse (Altinay and Paraskevas, 2008). Malhotra and Birks (2006) pointed out that there are at least 32 different probability techniques which are derived by combining the aspect of element and cluster sampling; equal unit probability and unequal unit probabilities; unstratified and stratified selection; random and systematic selection; single-stage and multistage techniques. Example of research in tourism that employed probability sampling include Yuan and Jang (2008) random intercept, Sanchez *et al* (2006) multistage quotas-stratified random sampling and Baker and Crompton (2000) systematic random sampling.

In contrast non-probability sampling uses human intervention (Bradley, 1999) and to this effect the chance of selecting each element in a population is unknown, and for some elements, it is zero. Often research in tourism employs some form of non-probability sampling such as convenience online sampling in event context (Bojanic and Warnick, 2012); intercept at tourist attractions (Zabka, *et al.,* 2010); 'first free' exit survey in attraction context (Nowacki, 2009); and convenience sampling in holiday travel context (Gallarza and Saura, 2006).

Populations differ in term of accessibility. Visitor attractions are noted for their trifling cooperation for surveys to be undertaken on their premises particularly at peak or busy period (see O'Neill and Charters, 2000). It is essential that a researcher take into consideration the accessibility of the intended respondents and put in place a contingency plan because accessibility of a population is likely to influence the ability of the researcher to successfully implement a sample design (Daniel, 2012). Some segments of varying populations are considered 'hidden' due to the issue of accessibility in terms of location, respondents' willingness to cooperate, social status or even illness or/and diseases. 'Hidden' populations are often cited in medical research relating to disease that comes with social stigma or other social ills such as drug addiction and prostitution (see Hechathorn, 2002; Daniel, 2012). Respondents in tourism research, although not 'hidden' can be unreachable if they are in locations inaccessible to a researcher. Orams and Page (2000) argue that visitors are 'non captive', their attention is often on the attractions and they are free to arrive and leave an attraction when they so wish. Arguably, it is often difficult for

tourists at destinations or attractions, as the case may be, to complete a questionnaire survey because this group of people's primary focus is on participating in one form of activity or the other which may necessarily not put them in a position or appropriate frame of mind to complete a questionnaire.

### *3.9.4 Questionnaire distribution*

After obtaining ethical approval from University of Salford, the researcher contacted the two case visitor attractions through email introducing and explaining the research, its aim and the use of intended outcome. The researcher invited them to participate in the study and sought their approval for data to be collected on site, via websites or database of email addresses. After follow up telephone calls, Blists Hill Victorian Town agreed to participate. The initial proposal was to select participants based on a systematic random sampling technique by obtaining the email addresses of prospective respondents through the case attractions and/or forums. This proposal was, however, dropped due to the following reasons:

1. The case attractions and forum were not able to help in the areas of posting questionnaire on their websites or providing access to database of email addresses of visitors;
2. The BHVT does not have a forum like the Alton Towers;
3. Most of the members of the Alton Towers' forums have their mails boxes set not to receive unsolicited emails;

4. Forum administrators were only able to give approval to post survey on specific subject on public places on the forum most of which are obscure and hard to access.

Given the above situation, purposive and snowball sampling techniques (non-probability sampling techniques) were adopted in order to answer the research question and meet the objectives of the study.

The administration of a questionnaire can be a vital factor in the success of the data gathering activity and the entire research process. Dillman (2007) noted that different modes of data collection often produce varied results; it therefore may seem desirable to avoid conducting survey by more than one mode; however, in some cases it is unavoidable to employ multiple modes if response rate is to be maximised. Based on the issue of access in attraction surveys and in order to maximise the response rate a tailored mixed-mode survey (Schaefer and Dillman, 1998) was adopted. Dillman (2007) identified five situations for the use of mixed-mode surveys. These are:

1) Collection of same data from different members of a sample;
2) Collection of panel data from same respondent at later time;
3) Collection of different data from the same respondents during a single data collection period;
4) Collection of comparison data from different populations;
5) Use one mode only to prompt completion by another mode.

Dillman (2007) opined that the first situation is the commonest where two or three modes are combined to reduce cost and maximise response rate (see Table 3.9 for further explanation).

The tailored mixed-mode method employed in this study falls in Dillman's (2007) first category identified above and enabled the researcher to collect information from respondents via online survey and through paper-based questionnaires. Litvin and Kar (2001) reported that after a search of the literature it was noted that no study had compared email surveying with mall-intercept data collection which is common in tourism research. It will be interesting to explore the efficacy of e-survey further (as explored in other context – see Litvin and Kar, 2001) and compare this to exit survey especially from visitor attraction research perspective.

Table 3.9 Types of Mixed-Mode Formats by Objectives and Unintended Error Consequence

| **Mixed-mode situation** | **Typical objective** | **Consequence** |
|---|---|---|
| Collection of same data from different members of a sample | Reduce cost and nonresponse | Measurement differences |
| Collection of panel data from same respondent at later time | Reduce cost and nonresponse | Measurement differences |
| Collection of different data from the same respondents during a single data collection period | Improve measurement and reduce cost | None apparent |
| Collection of comparison data from different populations | Convenience and reduce cost | Measurement differences |
| Use one mode only to prompt completion by another mode | Improve coverage and reduce nonresponse | None apparent |

Source: Dillman (2007)

#### *3.9.4.1 Online survey - attraction forums*

Five Alton Towers' forums were contacted to seek approval for their members to participate in the survey. The five forums were: Alton Tower Almanac (2149 members), Tower Nerd (5480 members), Tower Times with 4130 membership, Merlin Mania (membership size not known) and Mania Hub (1716 members). It was envisaged that access will be gained to their membership databases facilitating questionnaires to be sent to randomly selected emails, as the researcher is a member of most of these forums, access to all members via email was feasible; however, permission was still needed and this was granted and technical access given, in some cases, to contact a large number of people at a time. It was assumed that all members of the forum would have visited the attractions and will be individuals above the age of eighteen.

Two of the forums however responded but were unable to give the researcher permission to contact individual members in this regards due to their privacy policy. However, the researcher was given access to post links and description of the research on 'Community topics'. Information as to how many people that agreed or did not agree to participate in the survey was not ascertained. In essence no checks could be made to determine non-response bias.

Unfortunately Blists Hill Victorian Town has no membership forum hence no forum was contacted in this regard. However, the link for Blists Hill Victorian Town was also posted on the entire Alton Towers forum websites with the assumption that some members may have visited the Victorian town.

### *3.9.4.2 Online survey – universities and colleges*

A modified snowballing sampling technique was adopted as stated above. Participants were also recruited from the University of Wolverhampton, Birmingham Metropolitan College and universities and colleges around the West Midlands. University and college communities consist of heterogeneous markets ranging from parents with children who seek quality family days out for young people who love the thrill and adventure of theme parks; as such, this population is relevant for the Alton Towers case study. In addition, the 'educational' market is a viable sampling frame given the Blists Hill Victorian Town case study.

The questionnaires were administered electronically (intranet/internet mediated questionnaire). An initial email (Appendix 6) was sent to the university population (after approval from the School of Sport, Performing Arts and Leisure Ethics Committee) informing the prospective respondents with the aim of the research and seeking their consent to take part in the survey. Each respondent who is qualified and consented to participate in the study were asked to visit the questionnaire website. Students and staff from schools of Technology and Education and Wolverhampton Business School also participated in the survey after approval from the concerned schools was granted.

It was difficult to ascertain how many Alton Towers questionnaires were completed through this mode because the 'distribution' of the instrument ran concurrently with the attraction forum. In all a total of 323 completed

questionnaires were collected. The questionnaires were administered in the period between June and December 2011.

### *3.9.4.3 Exit survey at the Blists Hill Victorian Town site*

Having been given an approval to collect data at the Blists Hill Victorian Town site the researcher in company of three research assistants were assigned a table at the exit of the site leading to the gift/souvenir shop (see appendix 4 and 5 for site map and plan of the location of the table). Exiting visitors were approached at this location and encouraged to participate in the survey. Exit survey often has convenience sampling element to it even if by design it is to gather data by the random sampling approach. It is often impractical to intercept, engage and receive the cooperation of exiting potential participants at attractions, malls or destinations in a perfectly random manner (see Woodside and Dubelaar, 2002 and Litvin and Kar, 2001). To this end and in order to optimise response rate convenience sampling approach was adopted.

To maintain uniformity, responses were to be collected electronically by the use of internet tablets and lap top computers; however, this was not possible because of difficulty in getting internet access hence a 66 item paper-based questionnaire identical to the internet-based version was used.

The questionnaire administration took place on a Saturday the 3rd of September 2011. The researcher and his assistants collected data by intercepting visitors who were leaving the site, explaining the purpose of the study and seeking their cooperation in participating in the survey. Once the individuals agreed to take

part in the survey, they were given a copy of the questionnaire, a pen and offered a seat. Soliciting was terminated the moment a visitor indicated their unwillingness to participate; and the survey team moved on to approach the next available visitor. On the whole, each questionnaire took roughly 15 minutes to complete. A total of 183 questionnaires were completed at this site and a total, inclusive of the electronic survey, of 247 questionnaires were completed. Unfortunately the researcher did not have the opportunity to conduct an exit survey at the Alton Towers sites which would have provided an avenue to compare results for the two sites.

### *3.9.5 Ethical consideration*

Ethical concerns must be part of the essential consideration in the design of any research, and ideally any proposed research must be approved by an ethics committee or should be talked through with colleagues, to ensure that the research does not, as a minimum, contravene the published ethical principles or jeopardize business or individual legitimate interest (Banister *et al.,* 1994 in Finn, White & Walton, 2000). Consequently, diverse ethical issues were taken into consideration while conducting this research generally and administering the research instruments in particular. Obviously, participants had freedom of participation and the results of the research were confidential. The survey itself was anonymous to the extent that respondents did not take part in the raffle draw (see the section on incentive below). It was ensured that sensitive questions that are capable of offending the participants were not included in the questionnaire. Moreover, before a visitor started filling the questionnaire, the purpose of the research was explained in an introduction in order not to waste

respondents' time and to make sure that they had the knowledge of the topic and were willing to share it.

#### *3.9.5.1 Incentives*

In order to increase the response rate to the questionnaire survey, all respondents that decided and consented to take part, were entered into a free prize draw for a £100 cash prize. Incentives are acknowledged to increase response rates in surveys (Singer *et al.*, 1999). Saunders *et al.* (2007) nevertheless warned that this must be used with caution. Although there has been debate regarding the use of both monetary and material incentive in research. Nevertheless, incentives are increasingly used in service marketing and tourism research. The prize draw was a valuable inducement for people to take part in the study.

### *3.9.6 Reliability and Validity*

The importance of evaluating the adequacy of the research process, instruments and scale item cannot be overemphasised. The quality of the outcome of a piece of research is judged against two criteria: reliability and validity. The following sub-section enumerates the steps taken to both ensuring and achieving reliability and validity.

#### *3.9.6.1 Reliability and Validity of the qualitative research*

According to Lincoln and Guba (1985) the four criteria against which the validity, generalisability, and reliability of qualitative research can be tested are 'credibility', 'transferability', 'dependability' and 'confirmability'. Credibility

denotes how truthful a given set of findings are; transferability is concerned with the degree to which the given findings are related to another setting or group; dependability which is related to reliability, denotes the consistency of the findings and the degree to which such findings are replicable; and confirmability, relates to the objectivity of the findings.

As part of the first phase of this study an unstructured interview was conducted to gather data regarding attributes that determine the formation of quality perception in visitor attractions. To ensure the credibility of the interviews with the chosen respondents, a number of measures were taken. Foremost, even though collecting qualitative data cannot often be considered a statistical representation of the whole population, the researcher ensured that the composition of respondents reflects the profile of the attraction market. The respondents who agreed to be interviewed were properly briefed about the objectives of the study, and consequently the interview. This was particularly beneficial both for the study and the respondents as subjects were clearly aware of what was expected from them and answered questions effectively. Additionally, Interviewees were reassured of anonymity prior to the start of each interview. Further to this, the author made notes during each interview and cross check just before the end of the interview if what was written captured the responses of the interviewees. Notes were later transcribed and analysed. Both the open nature of the discussion and the fact that the literature support most of the quality attributes and features identified confirms the credibility of the interviews.

The transferability of the interview details was demonstrated through the use of a number of sources which corroborated the data and established that similar quality attributes were found in a variety of visitor attractions. Equally, the dependability of the data was proven as a result of the repetition and similarity of respondents' views and opinions throughout the interviews.

To ensure confirmability of the interview data, interviews were conducted on a one-to-one basis where interviewees were at no point able to discuss and/or influence each other as in focus group interviews. The information generated by the interviews was confirmed through triangulation with the other qualitative data sources such as the free elicitation survey, promotional material and the literature (see sections 3.7.2 and 3.7.3 for details). More importantly, the entire four criteria were subsequently validated through the quantitative research findings.

In qualitative research, reliability refers to the degree to which another researcher's work would generate similar results to a given research (Veal, 1997; Easterby-Smith *et al*, 2002; Saunders *et al.,* 2007; Creswell, 2009). Given the nature of qualitative research, the interviewer is a potential source of bias in terms of how the data are analysed and interpreted in addition the possible influence on the type of questions asked and the condition under which interviewees respond to them. In the same vein, interviewees could be source of bias. In this case, bias can be as a result of the nature of the participants of the interview, or their predisposition to the interviewer or the investigation. In order to minimise the risk of such bias, Saunders *et al* (2007)

warn that qualitative interviewers need to demonstrate credibility and trustworthiness, explain the purpose of the discussion and the exact nature of the data required, frame and convey questions effectively, use probing questions to explore and/or seek explanation. In addition to the aforementioned, the researcher must project an interested and attentive but unbiased image. These guidelines were strictly observed in this study by the researcher.

The expert opinion followed the same principles. Owing to the nature of this procedure, there was no face-to-face contact with respondents rather a limited email contact existed. The validity and reliability of the attributes and their grouping was scrutinised by experts in attractions and services management on iterative basis (see section 3.7.4 for details). The validity and reliability of the attributes and their initial grouping was therefore confirmed by leading academic experts in the subject areas

#### *3.9.6.2 Reliability and Validity of the quantitative research*

##### *3.9.6.2.1 Reliability*

The subject of reliability in the research process seems somewhat complicated. As stated earlier reliability is the extent to which research findings would be the same if the research were to be repeated at a later date. Identical questions asked of people in different locations, even within the same country or region, are likely to produce different results, because of the varying social and physical environment (Veal, 1997).

Several assessment approaches for reliability can be found in the literature. Parameswaran *et al* (1979) contend that there is no best approach but researcher should use the variety available in tandem. According to Mitchell (1996) the three tests of reliability mostly discussed in the literature include: test re-test, internal consistency and alternative form.

1. Test re-test estimates are attained when an instrument is used to measure the same group of respondent twice under near equivalent conditions. The scores from the two tests are then correlated; the result allows inferences to be made regarding the stability of the measure over time.
2. Internal consistency reliability is calculated by finding the inter-correlation among the scores of items on a multiple-item scale, such as the attraction attribute scale used in this study. In essence, this method measures the consistency of responses across all the questions and/or sub-categories measuring dimension within the questionnaire (Saunders *et al.,* 2007). According to Mitchell (1996) the basic form of internal consistency reliability test method is split-haves supported by Cronbach coefficient alpha to overcome the issue of finding the 'real' reliability coefficient.
3. Alternative form according to Mitchell (1996) is obtained by applying two 'equivalent forms' of measurement to the same subjects. Reliability is assessed by the degree of correlation between the scores of the two forms.

#### *3.9.6.2.2 Reliability of single-item question*

Ideally both test re-test and alternative form are applicable in establishing single-item reliability. However, Rossiter (2002) contends that the use of multiple items in ascertaining single item reliability is unnecessary in marketing scale. For completely concrete constructs, one concrete item is sufficient and for abstract constructs, one concrete item for each constituent or first-order dimension is all that is required (Rossiter, 2002). Also in spite of test re-test usefulness in establishing reliability coefficients which helps in indicating the accuracy and consistency of a measure over time, it was impractical to implement collection of data with the instrument used in this research twice under a near equivalent conditions hence test re-test was not considered. More practical suggestions were put forward by de Vaus (1996:55) in order to improve the reliability of single-item questions. The guidelines include the following:

- Use well-tested questions from reputable questionnaire;
- Use carefully worded questions in questionnaires;
- Provide neutral response options;
- Ensure standardised coding method is used.

Single-item reliability was ensured in this study by observing and adopting de Vaus' (1996) guidelines.

#### *3.9.6.2.3 Validity*

Validity is the extent to which the information collected by the researcher truly reflects the phenomenon being studied. This can be a very complex issue in tourism research as empirical studies are mainly concerned with people's behaviour and attitudes. Thus, the researcher is essentially reliant on people's own reports in the form of responses to questionnaire or interviews (Veal, 1997). There is a wide range of type of validity; however, Oppenheim (1992) submits that only three major validity tests are essential in establishing scale validity. These tests or types of validity are: content and face validity, construct validity and criterion-related validity. Jennings (2001) also noted that these are the main types of validity that are commonly investigated in tourism quantitative research but pointed out that content validity and face validity are separate and different. Rossiter (2002) also warns that face validity should not be confused for content validity because they are distinct. Face validity is a post hoc claim that the items in the scale measure the construct (Nunnally and Bernstein, 1993). Conversely, content validity is *a priori* evidence that the items are a good representation of the construct.

Sirakaya-Turk *et al.,* (2008) argue that there is no stringent procedure for establishing face validity and content validity. Logically, since the test for these types of validity is a practical one (Tull and Hawkins, 1993), face validity and content validity are more appropriate to be determined by the individuals who respond to the survey or experts who are familiar with the research domain (Rossiter, 2002 and Sirakaya-Turk *et al.,* 2008). The perceived quality scale was developed as a result of the first phase qualitative research and

review of the literature which enable the generation and assemblage of a number of items to measure quality. Also two distinct procedures (expert opinion survey and pilot testing of questionnaire) were undertaken to determine the extent to which the scale items were suitable and conclusive in measuring perceived quality of the case visitor attraction. To this end, content validity was established through literature review, free elicitation survey, content analysis of attractions promotional materials and expert opinion survey. Face validity was equally established through pilot testing of the questionnaires. Further to this, two individuals were purposely asked to comment on the attractiveness and appropriateness of the instrument.

Criterion-related validity is concerned with the ability of the measuring instrument to predict other external criteria. Sirakaya-Turk *et al.,* (2008) argued that criterion validity can be examined by predictive validity, which indicates the prognostic capability of an instrument against some benchmarks that are external to the measuring instrument itself. In simple terms criterion-related or predictive validity involves the comparison of results of an existing, widely-accepted instrument with that of a new one to observe if there will be an acceptable level of correlation. In order to assess the predictive validity of the scale used in this study there are various theoretically related measures such as SERVQUAL, SEVPERF, DINESERV, LODGSERV and HISTOQUAL. HISTOQUAL would have been the most applicable. However, the validity of the existing measure must be assumed (de Vaus, 1996). An invalid established measure will produce low correlation when the two measures are compared and this will be taken that the new measure is invalid when this may not be the

case. Therefore, it may be a self-defeating exercise to validate a new measure against an old measure. Further to this, the consideration for acceptable, reasonable length questionnaire that is not monotonous to respondents did not permit inclusion of a 24-item HISTOQUAL measures.

Construct validity involves providing evidence about the factors that cause the manifestation of the construct (Sirakaya-Turk *et al.,* 2008). According to Nunnally and Bernstein (1993), in terms of scale development, there are three conditions that must be satisfied for construct validity to be achieved.

1. The construct, in this case perceived quality of a visitor attraction, has to be clearly defined. In this study, perceived quality is defined as a formative construct because this approach allows a clear definition to be achieved particularly in terms of composition of attributes (See section 2.8.4.4 for detail).
2. In addition to construct definition the construct must be well represented by the scale items. Representativeness of scale items requires a strong relationship between items measuring the same construct in order to ensure internal consistency.
3. The construct must display a strong relationship with similar constructs. This facilitates the investigation of the relationship between theoretically related variables and the construct under investigation (Sirakaya-Turk *et al.,* 2008).

In essence, a scale should exhibit characteristics similar to the construct it claims to measure (Ryan, 1995). Tull and Hawkins (1993) note that construct validity is the most complicated type of validity; however, it can be assessed by convergent and discriminant validity. Yuksel and Remington (1998) add a third criterion - nomological validity which a scale must satisfy to achieve construct validity. Sirakaya-Turk *et al.,* (2008) observe that from a scale validity viewpoint, convergent validity relates to the trait validity or unidimensionality, where on the other hand discriminant validity indicates the distinctiveness of the scale from the theoretical unrelated variables. Essentially, convergent validity refers to the extent to which individual measures correlate with associated measures and normally the researcher should seek a high degree of correlation between related variables (Ryan, 1995). Conversely, the discriminant validity seeks to offer evidence of the extent to which the scale provides a distinct and superior measure. Sirakaya-Turk *et al.,* (2008) argue that if the scale is multidimensional, as in the case of this study, the intercorrelations of the subscales or dimensions should not be drastically high; contravening this condition indicates there is an overlap in the scale dimensions which consequently signifies that the discriminant validity of the scale is jeopardized. The third condition, nomological validity indicates the degree of the association of a measure to a different-but-related construct in a theoretically predicted manner (Yuksel and Remington, 1998). After the establishment of convergent and discriminant validity, a further examination of the causal relationships between the derived constructs and other constructs or variables of interest is necessary to see if the derived constructs function in the

way dictated by the fundamental principles guiding the attraction attribute performance scale development (Chen and Hsu, 2001).

In assessing the construct validity of the attraction attribute performance scale, Pearson product-moment correlation was employed (after Yuksel and Rimmington, 1998). Pearson scores were calculated for the attraction attributes performance measure utilising subjects' scores on the five point Likert-like scale – using the index of the attraction factor, for the subjects' responses to overall satisfaction with the attraction, Positive word of mouth (measure with 'I would speak highly of the attraction to friends and relatives'), intention to recommend (measure with 'I would recommend the attraction to others'), intention to revisit (measure with 'I would visit the attraction again') and index of overall value.

The correlation of overall satisfaction, overall perceived value, the three behavioural intention measures and the index of attraction attribute factors indicates a considerably high, statistically significant correlation between all the measures. The results of the correlation analysis are present in Table 3.10 below. The correlation of the index of attraction factors and overall satisfaction yielded a score of 0.623 $p<0.01$ as well as 0.627 $p<0.01$ with the index of overall value which indicates that the scale has convergent validity because there was high degree of positive correlation between the variables (Ryan, 1995).

Table 3.10 Construct Validity of Attraction Attributes Performance

| | | Overall satisfaction | Positive word of mouth | Intention to recommend | Intention to revisit | Index of Overall Value | Index of Attraction Factor |
|---|---|---|---|---|---|---|---|
| Overall satisfaction | Pearson Correlation | 1 | .802** | .737** | .579** | .601** | .623** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 | .000 |
| | N | 450 | 445 | 444 | 441 | 447 | 176 |
| Positive word of mouth | Pearson Correlation | .802** | 1 | .810** | .674** | .641** | .622** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 | .000 |
| | N | 445 | 455 | 453 | 449 | 451 | 175 |
| Intention to recommend | Pearson Correlation | .737** | .810** | 1 | .695** | .618** | .572** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 | .000 |
| | N | 444 | 453 | 454 | 448 | 450 | 175 |
| Intention to revisit | Pearson Correlation | .579** | .674** | .695** | 1 | .502** | .613** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .000 | .000 |
| | N | 441 | 449 | 448 | 450 | 446 | 174 |
| Index of Overall Value | Pearson Correlation | .601** | .641** | .618** | .502** | 1 | .627** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | | .000 |
| | N | 447 | 451 | 450 | 446 | 461 | 175 |
| Index of Attraction Factor | Pearson Correlation | .623** | .622** | .572** | .613** | .627** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | |
| | N | 176 | 175 | 175 | 174 | 175 | 185 |

**. Correlation is significant at the 0.01 level (2-tailed).

There was also evidence that the scale passed the test of discriminant validity as the correlation with overall satisfaction (0.623) is greater than the three measures of behavioural intentions - Positive word of mouth (0.622); Intention to recommend (0.572) and Intention to revisit (0.613). Further perusal of the correlation scores revealed that nomological validity was also satisfied. Visitor satisfaction and performance of attraction attributes correlate with behavioural intentions in a theoretically predicted manner. In the literature, (see for example Cole *et al.*, 2002) high level of visitor satisfaction, and/or perception of high service quality are likely to enhance visitors' intention to revisit a site and engage in positive word-of-mouth communication with family and friends. An additional evidence to buttress the achievement of nomological validity is predicated on the theoretical premise that visitors are more likely to

recommend than revisit since recommending is easier than revisiting. From the result it can be seen that overall satisfaction correlates in a theoretically predicted way with intention to recommend (0.737) having higher correlation that intention to revisit (0.579). To this end, the scale displayed theoretically predictable characteristics as it correlates with other measures to which it was theoretically related.

### 3.10 Preparation of data for analysis

On completion of the survey, data was loaded into SPSS version 19 for analysis. At the end of the survey period data was exported from Surveyor into Microsoft Excel and checked for usability. 43 questionnaires were excluded because they were incomplete. Numeric codes were allocated to each question on the questionnaire except the two open-ended questions which were separately content analysed. A codebook (Table 3.11) was devised to provide explanation for the coding of each variable. To avoid confusion and misrepresentation, the data and codes were loaded into SPSS independently. The matrix was subsequently checked for error after data input using the standard cleaning process (Pallant, 2009).

### 3.11 Chapter summary

This chapter discussed the methodology employed to shape the conduct of the research. The study's conceptual framework and hypotheses were presented. The methodology was divided into two phases with the first phase dealing with the process of scale development for the measurement of attraction attributes. The second phase dealt with questionnaire design and practical data collection.

In addition, the population and sampling techniques were discussed. Issues relating to reliability, validity, ethics and data preparation were also discussed. The following chapter presents the research findings and discussion.

Table 3.11 Codebook

| Question | Variable | SPSS variable name | Coding instruction |
|---|---|---|---|
| Q1 | Performance scale (amenities)<br>12 items | PSfA1 to PSfA6 | 1 (very poor) to 5(very good) 6(don't know) |
| Q2 | Performance scale (staff attributes)<br>5 items | PSfSA1 to PSfSA6 | 1 (very poor) to 5(very good) 6(don't know) |
| Q3 | Performance scale (physical setting)<br>6 items | PSfPS1 to PSfPS6 | 1 (very poor) to 5(very good) 6(don't know) |
| Q4 | Performance scale (retail attribute)<br>4 items | PSfRA1 to PSfRA6 | 1 (very poor) to 5(very good) 6(don't know) |
| Q5 | Performance scale (experience attributes)<br>21 items | PSfEA1 to PSfEA6 | 1 (very poor) to 5(very good) 6(don't know) |
| Q6 | Qualitative question | | |
| Q7 | Qualitative question | | |
| Q8 | Value scale<br>10 items | VS1 to VS6 | 1 (strongly disagree) to 5(strongly agree) 6(don't know) |
| Q9 | Satisfaction scale<br>5 items | SS1 to SS6 | 1 (strongly disagree) to 5(strongly agree) 6(don't know) |
| Q10 | Behavioural intentions scale<br>3 items | BIS1 to BIS6 | 1 (extremely unlikely) to 5(extremely likely) 6(don't know) |
| Q11 | Who were you with? | Who were you with? | 1 = on my own<br>2 = with a friend(s)<br>3 = with a colleague(s)<br>4 = with family<br>5 = other |
| Q12 | How many were you in your group? | Number in party | Number 1 up to 7 |
| Q13 | Gender | Gender | 1 = male<br>2 = female |
| Q14 | Age | Age | 1=18–24<br>2=25–34<br>3=35–44<br>4=45–54<br>5=55–64<br>6 = 65 and Over |
| Q15 | Occupation | Occupation | 1 = social grade A<br>2 = social grade B<br>3 = social grade C1<br>4 = social grade C2<br>5 = social grade D<br>6 = social grade E<br>7 = Student* |

# Chapter Four

# Data Analysis and Discussion

## 4.1 Introduction

This study explores issues in service quality within the UK visitor attractions sector with particular focus on Alton Towers and Blists Hill Victorian Town. The principal aim was to understand how visitors to attractions evaluate quality and determine the relationship between perceived service quality, value, customer satisfaction and post-visit behavioural intentions.

In order to achieve this aim, as stated in chapter one, the following specific objectives were devised:

- Delineate the constructs of perceived quality, value and customer satisfaction and establish how they influence behavioural intentions;
- Determine the factors that contribute to visitors' perception of quality and value;
- Determine the factors that most influence visitors' perception of these constructs;
- Examine the effect of sociodemographic characteristics on the perception of quality;
- Formulate and test a conceptual framework for understanding the relationship between perceived quality, value, customer satisfaction and behavioural intensions at visitor attraction level.

- Compare the differences in perceived quality, value, customer satisfaction and behavioural intensions between visitors at two types of attractions - heritage attractions with enactment and theme parks - using Blists Hill Victorian Town and Alton Towers as case studies.

The previous three chapters discussed the context of and rationale for the study, examined relevant literature in services and visitor attraction management, and described and justified the choice of research method and tools utilised in carrying out this study. The third chapter also discussed the development of the study's conceptual framework and the formulation of the study hypotheses which are as follows:

*H1: Quality is determined by the performance of the attraction attributes;*

*H2: Value is determined by the performance of the attraction attributes;*

*H3: Visitor satisfaction is determined by the perceived value of the attraction;*

*H4: Visitor satisfaction is determined by the perceived quality of the attraction;*

*H5: The influence of attraction attribute performance on visitor satisfaction is mediated by the perceived value of the attraction;*

*H6: The influence of perceived service quality on behavioural intentions is mediated by perceived value of the attraction;*

*H7: Behavioural intention is determined by the perceived value of the attraction;*

*H8 Behavioural intention is determined by the perceived service quality of the attraction;*

*H9 (a): The influence of quality on behavioural intention is mediated by visitor satisfaction;*

*H9 (b): The influence of value on behavioural intention is mediated by visitor satisfaction.*

Having explored and delineated the three service constructs in chapter two and discussed the conceptual framework and hypotheses in chapter three, this chapter analyses the data collected from the main survey, presents the findings, and discusses the tests conducted on the hypotheses outlined above.

The Statistical Package for the Social Science (SPSS) version 19.00 was used for data analysis. The chosen methods of analysis include the use of descriptive statistics to examine the demographic characteristics of the respondents. Other preliminary tests included for scale reliability and construct validity. The data were also subjected to Principal Components Analysis (PCA) with Promax rotation and Kaiser normalization to identify the underlying factors (dimensions) of attraction quality and perceived value. One-way analysis of variance and independent samples *t*-test were also employed in identifying significant differences in the visitor perception of attributes relating to the two attraction case studies. Gender, occupation and age of the visitors to the two case attractions were compared. Multiple regression analysis and Sobel statistics were employed to assess the direct and indirect influences of the

service constructs on the outcome variables including visitors' behaviour intentions. The following sections discuss the findings from analysis of data.

### 4.2 Initial consideration of the choice of appropriate statistical technique

A basic data analysis decision facing any researcher in social science and business management fields, including tourism, is the choice of statistical tools and techniques. The fundamental consideration in selecting an appropriate technique hinges on what is to be achieved (research objectives) and the characteristics of the data in question. To this end, reflection on the research objectives and a preliminary examination of the data set was necessary to shape the choice of techniques appropriate for testing the set of research hypotheses.

It is commonplace to find in most social science and business management research methods textbooks two broad categories of data: qualitative and quantitative data. Qualitative data is normally articulated by means of a day-to-day language description. Quantitative data on the other hand, expressed in numeric terms, although it must be noted that not quantitative data is continuous. Stevens (1946, 1968 in Harwell, 1988) outlined four categories of data. They are nominal, ordinal, interval and ratio categories.

Nominal data assumes no natural order; categories observed do not follow any particular ranking order. Typical examples include nationality, religion, race and sport. Conversely, ordinal scales elicit in a rank order. Typical examples include preference for particular brands. The best or worst value may not be ascertainable and likewise distance between categories may not be necessarily

measurable. By comparison, an interval scale is a generic quantitative measure where the distance between categories is equal and measurable (de Vaus, 1996). Scale measuring attitude employing Likert and Likert-like models are argued to be in this category (Gray and Kinnear, 2011). Ratio scale, like interval level scale, also has measurable equidistance between categories and in addition to this, has an absolute zero value. Number of visits to an attraction is a typical example of a ratio-scale variable.

In essence, variables assume different scales or levels. In the analysis of the results of this study, a mixture of data types with a variety of levels were obtained. To this end, consideration was given to the appropriate type of statistical tests and procedures. As noted by Field (2009) categorical (nominal) data are best analysed measuring the frequencies of the categories; employing graphs, charts, simple frequency table and cross tabulation of categories. A more sophisticated statistic, such as Pearson's chi-square test, can be used to explore the relationships that exist between categories by comparing the frequencies observed and those expected from categories by chance (Field, 2009). In a like manner, Shaw and Wheeler (1998) submit that inferential statistics can be used for the analysis of ordinal, interval and ratio data in order to understand the relationships between two or more variables and test hypotheses about the nature of the subject under examination. On this basis, inferential statistics were employed in examining the relationships between quality, value, satisfaction and behavioural intentions, and in testing the nine hypotheses proposed in this study. In relation to the consideration of inferential statistics, a choice between the use of parametric and non-parametric tests had

to be made. Harwell (1988) and Field (2009) warn that the importance of this decision should not be taken for granted by researchers for the reason that it affects both statistical and substantive inferences.

Debates about the suitability of parametric or nonparametric tests in given circumstances are not in short supply in the literature. Parametric tests are normally identified by their dependence on a normal distribution of data, whilst on the other hand, nonparametric tests, otherwise referred to as 'distribution-free' can be used when scaled data is skewed. Parametric test are reputed to be more statistically robust than their nonparametric counterparts (Howell, 2009; Field, 2009 and Pallant, 2010) because they are able to measure accurately the numerical proportion of variability with interval level data (Greene and D'Oliveira, 1999). Harwell (1988) also notes that there is evidence that some parametric test such as analysis of variance (ANOVA) perform validly well in the face of massive assumption violation. (See section 4.5 for the justification of the choice of test). Parametric tests were therefore used to analyse the data in this study.

### 4.3 Respondents' profile and demographic characteristics

Descriptive statistics were elicited to determine the mean scores and standard deviations of the case attraction attributes. Simple frequency statistics and charts were utilised to summarise the socio-demographic characteristics of the respondents.

The combined samples from the two attractions numbered 507 but only 445 supplied information regarding their gender and of which 45% were male and 55% female. The majority (49%) of the respondents were within the age range of 18 to 24 years (see Table 4.1). Over 40% were students; this is quite understandable because the online survey was largely distributed via university and college emails. The gender composition is similar to most family-oriented attraction visitor profiles in the literature (see for example McClung, 1991; Spinks *et al.,* 2005; Jonsson and Devonish, 2008; Rivera *et al.,* 2009). Forty-two percent visited the attractions in the company of family members whilst 38% were with friends. The number in each party was variable with 2 people in a party accounting for 25% and 7 people in a party accounting for 22%. The summary of the whole demographic profile of the respondents that completed the survey for the two sites can be found in Table 4.1.

When the profiles of the respondents for the two attractions were considered separately a more interesting trend emerged. Like the combined data, there were more female respondents (63%) from the Blists Hill Victorian Town survey compared to Alton Towers which recorded 114 female respondent representing 47%. Male respondents accounted for 37% and 53% at the Blists Hill and Alton Towers sites, respectively. Another interesting demographic characteristic in the data was age. The Alton Towers' sample had no respondent in the last two upper age categories - 55-64 and 65 and over. The majority (75%) of the Alton Towers respondents were in the 18-24 years age group. The age range for the Blists Hill survey was wide, with three out of the six categories accounting for between 19-20% each, although 65 and over category

had only 12%. Age categories 25-34 and 55-64 were 15% and 14% respectively.

Table 4.1 Combined Respondents' Profile and Demographic Characteristics

| **Demographic variables** | **n (%)** |
|---|---|
| Gender | |
| Male | 202(45.4%) |
| Female | 243(54.6%) |
| Age | |
| 18 – 24 | 223(49.4%) |
| 25 – 34 | 70(15.5%) |
| 35 – 44 | 59(13.1%) |
| 45 – 54 | 43(9.5%) |
| 55 – 64 | 30(6.7%) |
| 65 and Over | 26(5.8%) |
| Occupation | |
| Social grade A | 6(1.4%) |
| Social grade B | 86(20.1) |
| Social grade C1 | 60(14.1 |
| Social grade C2 | 22(5.2%) |
| Social grade D | 41(9.6%) |
| Social grade E | 37(8.7%) |
| Student | 175(41%) |
| Number in party | |
| 1 | 12 (2.7%) |
| 2 | 112 (25.3%) |
| 3 | 52 (11.7%) |
| 4 | 68 (15.3%) |
| 5 | 65 (14.7%) |
| 6 | 36 (8.1%) |
| 7 | 98 (22.1%) |
| Nature of party | |
| On my own | 11(2.2%) |
| With a friend(s) | 191(37.7%) |
| With a colleague(s) | 15(3.0%) |
| With family | 213(42.0%) |
| Other | 12(2.4%) |

A free text option was used to collect demographic profile relating to occupation. For ease of analysis the National Readership Survey (NRS) classification was adopted with a slight modification (see the code book – Table 3.11 and Table 4.2 for description of categories). A student category was

added to make a total of seven categories. As would be expected the Alton Towers survey recorded 62% of respondents in the student category as the highest point and the lowest (0.4%) being social grade A. The NRS defines social grade A as 'Higher managerial, administrative and professional'.

Table 4.2 Social Grade Based on Occupation

| Classification | Description |
|---|---|
| A | Higher managerial, administrative and professional |
| B | Intermediate managerial, administrative and professional |
| C1 | Supervisory, clerical and junior managerial, administrative and professional |
| C2 | Skilled manual workers |
| D | Semi-skilled and unskilled manual workers |
| E | State pensioners, casual and lowest grade workers, unemployed with state benefits only |

Source: NRS, no date

Compositions of party in both cases were quite interesting. When the nature of party was consider in terms of the type of people that constitute the party, in the Alton Towers survey, a majority (63%) was in company of a friend or friends. Twenty-eight percent were in the company of family members. In the case of the Blists Hill sample, majority (72%) claimed to be in the company of family members and 19% were with friends. People who were in 'on my own' category accounted for 3% in the Alton Towers sample and 2% amongst the Blists Hill respondents. In addition, people visiting Alton Towers were more likely to visit as a member of big group. Respondents who have visited Alton Towers as members of large group of seven or more accounted for 30%. Medium sizes of 4 and 5 also accounted for 18% apiece. On the other hand, the Blists Hill survey reveal people (39%) were most likely to visit as a party of two, possibly as couples. 17% of the visitors to the Blists Hill site visited as a

party of three possibly as family of three comprising of a mother, a father and one child. As reported earlier, lone visitors account for the lowest percentage in the two cases: 2% for Blists Hill and 3% for Alton Towers. The summary of respondents' profile and demographic characteristics by attraction can be found in Table 4.3.

Table 4.3 Respondents' Profile and Demographic Characteristics by Attraction

| **Demographic variables** | **Blists Hill Victorian Town n (%)** | **Alton Towers n (%)** |
|---|---|---|
| Gender | | |
| Male | 75(36.8%) | 127(52.7%) |
| Female | 129(63.2%) | 114(47.3%) |
| Age | | |
| 18 – 24 | 42(19.9%) | 181(75.4%) |
| 25 – 34 | 32(15.2%) | 38(15.8%) |
| 35 – 44 | 41(19.4%) | 18(7.5%) |
| 45 – 54 | 40(19.0%) | 3(1.3%) |
| 55 – 64 | 30(14.2%) | - |
| 65 and Over | 26(12.3%) | - |
| Occupation | | |
| Social grade A | 5(2.6%) | 1(0.4%) |
| Social grade B | 59(30.6%) | 27(11.5%) |
| Social grade C1 | 31(16.1%) | 29(12.4%) |
| Social grade C2 | 17(8.8%) | 5(2.1%) |
| Social grade D | 16(8.3%) | 25(10.7%) |
| Social grade E | 34(17.6%) | 3(1.3%) |
| Student | 31(16.1%) | 144(61.5%) |
| Number in party | | |
| 1 | 5(2.4%) | 7(3.0%) |
| 2 | 81(39.3%) | 31(13.1%) |
| 3 | 34(16.5%) | 18(7.6%) |
| 4 | 26(12.6%) | 42(17.7%) |
| 5 | 22(10.7%) | 43(18.1%) |
| 6 | 12(5.8%) | 24(10.1%) |
| 7 | 26(12.6%) | 72(30.4%) |
| Nature of party | | |
| On my own | 4(2.0%) | 7(3.0%) |
| With a friend(s) | 39(19.3%) | 152(63.3%) |
| With a Colleague(s) | 8(4.0%) | 7(2.9%) |
| With family | 145(71.8%) | 68(28.3%) |
| Other | 6(3.0%) | 6(2.5%) |

## 4.4 Determination of attraction attributes and conceptualisation of visitor attraction quality

As stated in the literature review chapter, the perceived service quality of an attraction offering was conceptualised as a formative construct rather than reflective construct commonly found in the early literature of service quality (see Dabholka *et al.,* 2000). In formative model, the meaning of the latent construct is as a result of its component parts because each indicator uniquely contributes to the conceptual domain of the latent construct (Dabholka *et al.,* 2000, Rositter, 2002 and Zabkar *et al.,* 2010). Perceived value was also conceptualised as a multi-dimensional construct (see Bello and Etzel (1985); Sheth *et al.,* (1991); Sweeney and Soutar (2001); Pectrick (2002); Chen and Hu, 2010).

### *4.4.1 Mean rating of attraction attribute performance*

Looking at the mean values of the attraction attributes (Table 4.4), the top attribute was ‘opportunity to bond with family and friends’ with a mean score of 4.56. This was followed by ‘visual attractiveness and appeal’ with 4.47 mean score. The results revealed a pattern that suggests that most visitors to the attractions take performance of attributes relating to the environment very seriously. Apart from the first attribute that was related to family and friends bonding, the next three most rated attributes relate to visual attractiveness and relaxing nature of the environment. This can be attributed to family seeking enabling environment to relax and bond.

Table 4.4 Visitor Attraction Attributes Ratings

| Attraction attributes | VP | P | N | G | VG | Mean | SD |
|---|---|---|---|---|---|---|---|
| Opportunity to bond with family and friends | 0.00 | 0.7 | 7.0 | 38.6 | 53.6 | 4.56 | 2.45 |
| Visual attractiveness and appeal | 0.8 | 1.0 | 3.0 | 40.9 | 54.3 | 4.47 | 0.69 |
| Pleasant and relaxing nature of the surroundings and atmosphere | 0.8 | 1.4 | 4.7 | 39.0 | 54.0 | 4.44 | 0.73 |
| Spectacular nature of the natural and built surroundings | 1.0 | 0.8 | 6.6 | 37.5 | 54.0 | 4.43 | 0.74 |
| Working condition of physical facilities and equipment | 0.8 | 0.4 | 3.0 | 47.1 | 48.7 | 4.42 | 0.65 |
| Appearance of reception staff | 0.2 | 0.6 | 5.9 | 44.5 | 48.8 | 4.41 | 0.65 |
| Staffs knowledge of products | 0.7 | 0.9 | 8.7 | 38.2 | 51.6 | 4.39 | 0.74 |
| Staffs ability to provide accurate and correct information | 0.4 | 1.7 | 8.3 | 37.9 | 51.7 | 4.39 | 0.75 |
| Treatment of visitors in a warm and friendly way by staff members | 0.6 | 1.7 | 9.3 | 37.1 | 51.3 | 4.37 | 0.77 |
| Consideration for health and safety | 0.2 | 0.9 | 8.3 | 44.3 | 46.3 | 4.36 | 0.69 |
| Entertainment | 0.4 | 2.6 | 11.1 | 35.5 | 50.5 | 4.33 | 0.81 |
| The use of technology | 0.2 | 1.5 | 10.6 | 40.9 | 46.7 | 4.32 | 0.74 |
| Information on opening hours | 0.2 | 1.8 | 9.5 | 42.8 | 45.7 | 4.32 | 0.74 |
| Range of activities | 0.2 | 2.1 | 10.6 | 40.3 | 46.8 | 4.31 | 0.76 |
| General cleanliness | 0.4 | 1.6 | 7.7 | 48.5 | 41.8 | 4.30 | 0.71 |
| Promptness of services to visitors | 0.2 | 2.7 | 9.0 | 45.4 | 42.7 | 4.28 | 0.75 |
| Effectiveness of written leaflets in providing enough information about the site | 1.2 | 2.7 | 10.6 | 39.0 | 46.5 | 4.27 | 0.85 |
| Access to souvenir store | 0.4 | 1.6 | 10.2 | 49.2 | 38.6 | 4.24 | 0.73 |
| Availability of something for everybody | 0.4 | 2.5 | 11.2 | 44.5 | 41.3 | 4.24 | 0.78 |
| Information provided at the front desk about the attraction | 0.6 | 1.7 | 14.7 | 40.7 | 42.3 | 4.22 | 0.80 |
| Parking facilities | 0.8 | 3.8 | 8.4 | 46.2 | 40.8 | 4.22 | 0.82 |
| Efficiency in the way ticket is sold/delivery | 0.9 | 2.8 | 11.4 | 48.1 | 36.8 | 4.17 | 0.80 |
| Ease of getting around within the site | 1.2 | 3.9 | 10.9 | 45.5 | 38.5 | 4.16 | 0.86 |
| Effectiveness of signage and direction within the site | 0.8 | 5.1 | 12.0 | 41.9 | 40.2 | 4.16 | 0.88 |
| Opportunity for recreation | 0.2 | 3.2 | 15.3 | 44.2 | 37.0 | 4.15 | 0.81 |
| Variety of choice in the souvenir store | 0.9 | 2.4 | 15.1 | 44.2 | 37.4 | 4.15 | 0.83 |
| Availability of toilets | 1.2 | 5.1 | 10.7 | 46.7 | 36.3 | 4.12 | 0.88 |
| Duration of activities | 0.4 | 2.9 | 15.8 | 46.8 | 34.1 | 4.11 | 0.80 |
| Facilities at the children's play area | 1.9 | 4.5 | 14.0 | 42.3 | 37.4 | 4.09 | 0.93 |
| Cleanliness of restrooms | 1.8 | 5.5 | 14.3 | 44.5 | 34.0 | 4.04 | 0.93 |
| Opportunities to get involved and interactivity | 0.7 | 6.2 | 17.9 | 40.0 | 35.2 | 4.03 | 0.92 |
| Access for physically challenged to most part of the site | 1.8 | 6.0 | 15.0 | 49.2 | 27.9 | 3.96 | 0.91 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Opportunity to learn | 1.7 | 9.8 | 17.3 | 33.8 | 37.4 | 3.95 | 1.04 |
| Quality of food on the site | 2.2 | 6.3 | 16.8 | 45.2 | 29.5 | 3.94 | 0.96 |
| Diversity of food and drinks | 3.2 | 8.0 | 20.3 | 39.8 | 28.6 | 3.82 | 1.04 |
| Transport services to the site | 2.3 | 10.2 | 19.5 | 39.2 | 28.8 | 3.82 | 1.03 |
| Management of waiting lines and queues are well managed | 3.6 | 11.8 | 18.0 | 36.4 | 30.1 | 3.77 | 1.11 |
| Smoking area | 4.0 | 5.4 | 28.7 | 37.6 | 24.3 | 3.73 | 1.02 |

Four out of the five attributes relating to staff were also rated high with mean scores between 4.41 and 4.37 emphasising the importance of the role of the personnel in the delivery of tourism services. The fifth staff attribute has the mean score of 4.28. Seven out of the thirty-eight attributes had a mean score of below 4.0. It appears a cross section of visitors perceived that 'smoking facilities' and 'management of queue' under-performed. In the case of smoking facilities, it would have been expected that as smoking becomes less acceptable in public places lesser number of people would be expecting organisations like visitors attractions to place important emphasis on smoking facilities. The result of this study indicates that a reasonably high proportion (38%) of attraction visitors would expect that attraction organisations take care of their smoking needs effectively. Regarding management of queue, the Alton Towers result would have been envisaged since visitors have to queue for a number of rides which could even take longer time during peak periods. The lower than 4.0 mean score of 'management of queue' in the context of the Blists Hill site is hard to explain as it has minimal number of attraction to wait in line for; possibly this may relate to time spent on the queue to get to the attractions and the way the queues were managed.

## 4.5 Analysis of the effect of the socio-economic characteristics of samples

The analysis of respondents' demographic characteristics in terms of statistical significant differences across the two attractions was further explored using parametric tests. The following sub-sections offer discussion on the justification of choice of test and analysis of mean differences across attractions, age, occupation and gender.

### 4.5.1 Justification for the choice of test

A number of criteria for choosing either parametric or nonparametric test abound (see Harwell, 1988; Malhotra and Birks, 2007 and Field, 2009). Harwell (1988) divided such criteria into two broad categories: statistical and substantive - the statistical criterion is based on the ability of the test to control Type 1 error rate at normal level and its statistical power; and the substantive criterion which focuses on the role of the measurement of variables in selecting an appropriate test. Field (2009) in a more explicit manner cited four criteria for choosing parametric tests; these criteria include: normal distribution, homogeneity of variance, independent observation and interval level measurement. The criteria are discussed in the context of this study under the four headings identified by Field (2009).

#### *4.5.1.1 Normal distribution*

Normal distribution is characterised by a bell-shaped curve featuring symmetrically distributed data with majority of the scores converging around the centre of the distribution. According to Malhotra and Birks (2007) its mode, median and mean are identical. It serves as the basis of statistical

inference and can be used to approximate many discrete and continuous distributions.

According to Field (2009) lack of symmetry (skewness) and height (kurtosis) are the two means by which a distribution can depart from the normality characteristics. Skewness is the propensity of the deviations from the mean to be heavier on one side of the distribution that the other. A skewed distribution can either be negatively or positively skewed which indicates a deviation from normal. The distribution is said to be positively skewed when the scores are heavily converged at the left side tail of the distribution curve. A distribution will be said to be negatively skewed if the reverse is the case. Conversely, kurtosis is the measure of a distribution flatness of tallness (height). Like the measure of skewness, kurtosis can assume negative or positive value. Positive kurtosis value signifies a pointy, heavy-tailed leptokurtic distribution whilst negative kurtosis value indicates a flat, thin-tailed, platykurtic distribution. An ideal normal distribution will have skew and kurtosis values of zero (Field, 2009; Pallant, 2010).

A range of tests can be conducted on a data set in order to assess the fulfilment of normality conditions. SPSS facilitates the calculation of the values of skewness and kurtosis of a data set. The statistical package also enables the computation of the Kolmogorov-Smirnov (K-S) and Shapiro-Wilk (S-W) values to determine the conformity of the distribution to normality conditions. It also helps in ascertaining whether the dispersal of a variable is significantly different from a normal distribution. Assumption of normality is reported to be

violated if the K-S and/or S-W values are significant ($p$<.05) (Tabachnik and Fidell, 2007). Additionally, another tool that can be used in assessing whether a distribution is normal is a graph derived from probability-probability plot (P-P plot). The graph plots the cumulative probability of a variable against the cumulative probability of a given normal distribution by ranking and sorting the data in order to calculate the corresponding *z*-score. The initial value is the expected value that the score should have in a normal distribution after which it is converted to a *z*-score. The P-P graph plots the actual *z*-score against the expected value. In a normal distribution the actual *z*-score is the same as the expected *z*-score (Field, 2009). A straight line formation of the plotted individual observed values through the diagonal line (expected value) signifies a normal distribution; however, deviation from the diagonal indicates departure from normality. Similar to the P-P graph is normal Q-Q chart which equally plots expected values against the observed values. The main difference is that normal Q-Q plot has fewer points because only values that divide the data into equal parts are plotted.

In order to ascertain that the distributions of variables in this study satisfy normality criteria the entire tests explored in the preceding paragraphs were carried out. The following sub-sections explain the result of the tests and the justification of the statistical test chosen.

#### *4.5.1.1.1 Distribution of the attraction attributes performance scale*

In order to visually assess the normality of the attraction attribute performance variable distribution a normal P-P graph and histogram were plotted. Figure

4.1a and Figure 4.1b indicate the propensity that the distribution is negatively skewed as illustrate by the histogram and P-P plot of the most heavily skewed variable – 'Visual attractiveness and appeal' (-1.714).

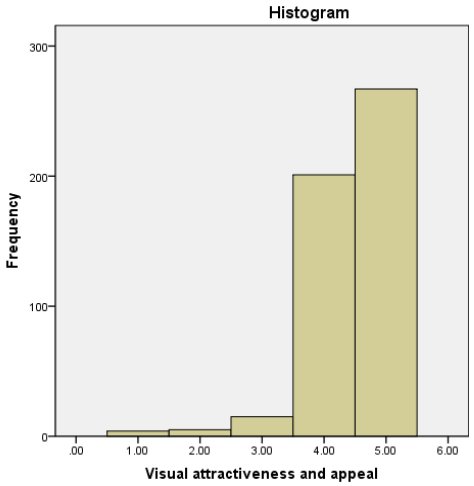


Figure 4.1a Histogram

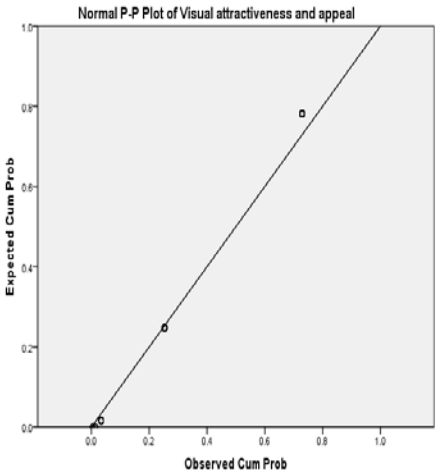


Figure 4.1b P-P plot

Owing to the fact that interpretation of charts and graph can be subjective a further exploration of the distribution was undertaken to quantify the shape of the distribution and check for possible outliers. Grubbs (1969) describes an outlier as an observation that seems to deviate noticeably from other variables in the same sample. Grubbs (1969) recommends that such score should be retained and analysed alongside other if the observation is as a result of the extreme manifestation of the random, uneven character of the data otherwise such observation should be discarded if it is due to error in handling data. No outlier was identified, however, it turned out that the entire 38 variable were negatively skewed. This indicated that all the responses were high end scores, at the right hand side of the normal curve.

Table 4.5 Distribution of Attraction Attribute Performance Scale

| Attraction attributes | N | Mean | Skewness | SE | Kurtosis | SE |
|---|---|---|---|---|---|---|
| Visual attractiveness and appeal | 492 | 4.47 | -1.714 | .110 | 5.068 | .220 |
| Opportunity to bond with family and friends | 459 | 4.46 | -.940 | .114 | .392 | .227 |
| Pleasant and relaxing nature the surroundings and atmosphere | 487 | 4.44 | -1.637 | .111 | 4.037 | .221 |
| Spectacular nature of the natural built surroundings | 483 | 4.43 | -1.605 | .111 | 3.835 | .222 |
| Working condition of physical facilities and equipment | 493 | 4.42 | -1.490 | .110 | 5.019 | .220 |
| Appearance of reception staff | 492 | 4.41 | -.964 | .110 | 1.463 | .220 |
| Staffs knowledge of products | 448 | 4.39 | -1.301 | .115 | 2.345 | .230 |
| Staffs ability to provide accurate and correct information | 472 | 4.39 | -1.260 | .112 | 1.888 | .224 |
| Treatment of visitors in a warm and friendly way by staff members | 483 | 4.37 | -1.286 | .111 | 1.971 | .222 |
| Consideration for health and safety | 456 | 4.36 | -.923 | .114 | 1.091 | .228 |
| Entertainment | 459 | 4.33 | -1.165 | .114 | 1.158 | .227 |
| The use of technology | 452 | 4.32 | -.958 | .115 | .812 | .229 |
| Information on opening hours | 451 | 4.32 | -.986 | .115 | 1.034 | .229 |
| Range of activities | 472 | 4.31 | -1.001 | .112 | .848 | .224 |
| General cleanliness | 491 | 4.30 | -1.041 | .110 | 1.873 | .220 |
| Promptness of services to visitors | 487 | 4.28 | -.999 | .111 | 1.129 | .221 |
| Effectiveness of written leaflets in providing enough information about the site | 490 | 4.27 | -1.296 | .110 | 1.945 | .220 |
| Access to souvenir store | 451 | 4.24 | -.920 | .115 | 1.439 | .229 |
| Availability of something for everybody | 472 | 4.234 | -.979 | .112 | 1.087 | .224 |
| Information provided at the front desk about the attraction | 477 | 4.22 | -.916 | .112 | .822 | .223 |
| Parking facilities | 478 | 4.22 | -1.219 | .112 | 1.885 | .223 |
| Efficiency in the way ticket is sold/delivery | 351 | 4.17 | -1.051 | .130 | 1.597 | .260 |
| Ease of getting around within the site | 488 | 4.16 | -1.160 | .111 | 1.609 | .221 |
| Effectiveness of signage and direction within the site | 492 | 4.16 | -1.047 | .110 | .899 | .220 |
| Opportunity for recreation | 443 | 4.15 | -.741 | .116 | .233 | .231 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Variety of choice in the souvenir store | 423 | 4.15 | -.935 | .119 | 1.076 | .237 |
| Availability of toilets | 488 | 4.12 | -1.122 | .111 | 1.356 | .221 |
| Duration of activities | 455 | 4.11 | -.747 | .114 | .520 | .228 |
| Facilities at the children's play area | 265 | 4.09 | -1.093 | .150 | 1.169 | .298 |
| Cleanliness of restrooms | 456 | 4.04 | -1.016 | .114 | .942 | .228 |
| Opportunities to get involved and interactivity | 452 | 4.03 | -.752 | .115 | .037 | .229 |
| Access for physically challenged to most part of the site | 333 | 3.96 | -.964 | .134 | .967 | .266 |
| Opportunity to learn | 417 | 3.95 | -.785 | .120 | -.202 | .238 |
| Quality of food on the site | 447 | 3.94 | -.924 | .115 | .694 | .230 |
| Diversity of food and drinks | 462 | 3.82 | -.784 | .114 | .148 | .227 |
| Transport services to the site | 344 | 3.82 | -.699 | .131 | -.142 | .262 |
| Management of waiting lines and queues are well managed | 439 | 3.77 | -.709 | .117 | -.301 | .233 |
| Smoking area | 202 | 3.73 | -.663 | .171 | .237 | .341 |

In addition, the null hypothesis that individual variable is normally distributed was tested employing K-S and S-W tests. As stated earlier, these procedures examine the goodness of fit of the data to a normal distribution based on the estimated parameters from the data. The result for the K-S test for the variable 'Visual attractiveness and appeal' was $D(492) = 0.28$, $p<.001$. Table 4.6 shows the full results of the tests which follow the pattern of the aforementioned attribute thus confirmed that the attraction attributes performance data did not fit a normal distribution because the tests were significant ($p<.001$) hence the distribution was significantly different from normal. Field (2009) however cautioned that large sample sizes have the tendency to produce significant results from small deviations from normality hence it is advisable to use these tests with caution.

Table 4.6 Results of Normality Tests

| | Kolmogorov-Smirnov | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | **Statistic** | **df** | **Sig.** | **Statistic** | **df** | **Sig.** |
| Working condition of physical facilities and equipment | .302 | 493 | .000 | .724 | 493 | .000 |
| Parking facilities | .320 | 478 | .000 | .754 | 478 | .000 |
| Information provided at the front desk about the attraction | .248 | 477 | .000 | .793 | 477 | .000 |
| Transport services to the site | .231 | 344 | .000 | .867 | 344 | .000 |
| Access for physically challenged to most part of the site | .279 | 333 | .000 | .825 | 333 | .000 |
| Smoking area | .239 | 202 | .000 | .846 | 202 | .000 |
| Effectiveness of signage and direction within the site | .256 | 492 | .000 | .818 | 492 | .000 |
| Availability of toilets | .261 | 488 | .000 | .818 | 488 | .000 |
| Effectiveness of written leaflets in providing enough information about the site | .273 | 490 | .000 | .782 | 490 | .000 |
| Facilities at the children's play area | .243 | 265 | .000 | .789 | 265 | .000 |
| Appearance of reception staff | .246 | 492 | .000 | .808 | 492 | .000 |
| Promptness of services to visitors | .227 | 487 | .000 | .829 | 487 | .000 |
| Staffs ability to provide accurate and correct information | .263 | 472 | .000 | .810 | 472 | .000 |
| Treatment of visitors in a warm and friendly way by staff members | .284 | 483 | .000 | .789 | 483 | .000 |
| Staffs knowledge of products | .256 | 448 | .000 | .789 | 448 | .000 |
| General cleanliness | .267 | 491 | .000 | .807 | 491 | .000 |
| Visual attractiveness and appeal | .277 | 492 | .000 | .698 | 492 | .000 |
| Cleanliness of restrooms | .241 | 456 | .000 | .850 | 456 | .000 |
| Ease of getting around within the site | .265 | 488 | .000 | .810 | 488 | .000 |
| Spectacular nature of the natural built surroundings | .325 | 483 | .000 | .742 | 483 | .000 |
| Pleasant and relaxing nature the surroundings and atmosphere | .298 | 487 | .000 | .740 | 487 | .000 |
| Quality of food on the site | .278 | 447 | .000 | .806 | 447 | .000 |
| Diversity of food and drinks | .255 | 462 | .000 | .832 | 462 | .000 |
| Access to souvenir store | .246 | 451 | .000 | .810 | 451 | .000 |
| Variety of choice in the souvenir store | .250 | 423 | .000 | .815 | 423 | .000 |
| Availability of something for | .273 | 472 | .000 | .794 | 472 | .000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| everybody | | | | | | |
| Opportunity to bond with family and friends | .348 | 459 | .000 | .732 | 459 | .000 |
| Efficiency in the way ticket is sold/delivery | .232 | 351 | .000 | .814 | 351 | .000 |
| Opportunity to learn | .209 | 417 | .000 | .872 | 417 | .000 |
| The use of technology | .301 | 452 | .000 | .774 | 452 | .000 |
| Information on opening hours | .308 | 451 | .000 | .771 | 451 | .000 |
| Consideration for health and safety | .326 | 456 | .000 | .740 | 456 | .000 |
| Entertainment | .306 | 459 | .000 | .773 | 459 | .000 |
| Management of waiting lines and queues are well managed | .202 | 439 | .000 | .858 | 439 | .000 |
| Opportunities to get involved and interactivity | .231 | 452 | .000 | .844 | 452 | .000 |
| Opportunity for recreation | .230 | 443 | .000 | .824 | 443 | .000 |
| Range of activities | .256 | 472 | .000 | .812 | 472 | .000 |
| Duration of activities | .220 | 455 | .000 | .831 | 455 | .000 |

Luengo *et al.* (2009) also note that the K-S test on one hand, performs poorly because it possesses low power and S-W on the other whilst possess superior statistical power is adversely affected in common situations where there is tied data. In the light of these, K-S and S-W tests were utilised in conjunction with probability graph and histogram. In conclusion, and as it be seen from the run of all the tests, it can be declared that the normality condition was not fulfilled.

#### *4.5.1.1.2 Distribution of perceived value, visitor satisfaction and behavioural intentions variables*

Assessment of the normality of the other three constructs in the conceptual framework was also undertaken. In a like manner, the results show similar pattern to the attraction attributes distribution with all variables in all categories being negatively skewed. Again, this indicates that responses were high end scores that converge at the right hand side of the normal curve. Table 4.7

shows the scores of the skewedness and kurtosis of the perceived value, visitor satisfaction and behavioural intentions distributions.

Table 4.7 Distribution of Perceived Value, Satisfaction and Behavioural Intentions

| Variables | N | Mean | Skewness | SE | Kurtosis | SE |
|---|---|---|---|---|---|---|
| **Perceived value** | | | | | | |
| The visit was value for money | 456 | 3.7873 | -.765 | .114 | -.068 | .228 |
| Admission was reasonably priced | 450 | 3.4778 | -.465 | .115 | -.625 | .230 |
| The visit made me happy | 457 | 4.2801 | -.918 | .114 | 1.718 | .228 |
| I was excited with the visit | 455 | 4.1824 | -.697 | .114 | .032 | .228 |
| The visit improved the way I am perceived by my peers | 371 | 3.4259 | -.165 | .127 | -.280 | .253 |
| The visit gave me social approval from others | 367 | 3.4360 | -.304 | .127 | -.290 | .254 |
| It made me feel adventurous | 418 | 3.7225 | -.587 | .119 | -.062 | .238 |
| The visit satisfied my curiosity | 441 | 3.9615 | -.667 | .116 | .617 | .232 |
| **Visitor satisfaction** | | | | | | |
| I was delighted with the attraction | 461 | 4.0456 | -.928 | .114 | 1.545 | .227 |
| I was pleased that I decided to visit the attraction | 459 | 4.2898 | -1.106 | .114 | 2.866 | .227 |
| The experience I had visiting the attraction exceeded my expectation | 457 | 3.8600 | -.554 | .114 | -.250 | .228 |
| Visiting the attraction was exactly what I needed | 437 | 3.8535 | -.582 | .117 | .366 | .233 |
| Overall I was satisfied with the attractions offering | 450 | 4.2111 | -.982 | .115 | 1.408 | .230 |
| **Behavioural intentions** | | | | | | |
| I would speak highly of the attraction to friends and relatives | 455 | 4.2879 | -1.078 | .114 | 1.326 | .228 |
| I would recommend the attraction to others | 454 | 4.3656 | -1.240 | .115 | 2.222 | .229 |
| I would visit the attraction again | 450 | 4.2800 | -1.387 | .115 | 2.035 | .230 |

The kurtosis scores were somewhat mixed with five of the value variables being platykurtic with highest score in this category being -.625. The lowest leptokurtic score in this category was 0.032 for perceived value variable 'I was excited with the visit'. Only one of visitor satisfaction variable, 'The experience I had visiting the attraction exceeded my expectation', was platykurtic with score of -0.250. Scores for other variables in this category and in the behavioural intentions category were leptokurtic.

Further assessment of the normality characteristic of the perceived value, visitor satisfaction and behavioural intentions distributions employing K-S and S-W revealed that the data for the three service constructs did not fit a normal distribution because the tests were significant ($p<.001$) thus the assumption of normal distribution was violated. Table 4.8 shows the scores of the K-S and S-W tests for the perceived value, visitor satisfaction and behavioural intentions distributions.

#### *4.5.1.2 Homogeneity of variance*

Homogeneity of variance is a characteristic of data that indicates the rejection of the hypothesis that group variances are equal. Bartlett's or Levene's test are the two commonly used tests employed in checking the homogeneity of samples' variances. However, Luengo *et al.,* (2009) cautioned that Bartlett's test is not desirable where the observed data does not fulfil normal distribution criteria. Leven's test assesses the null hypothesis that the variances between the score of two groups are equal.

Table 4.8 Results of Normality Tests for Perceived Value, Visitor Satisfaction and Behavioural Intentions

| | Kolmogorov-Smirnov | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | **Statistic** | **df** | **Sig.** | **Statistic** | **df** | **Sig.** |
| **Perceived value** | | | | | | |
| The visit was value for money | .275 | 456 | .000 | .855 | 456 | .000 |
| Admission was reasonably priced | .254 | 450 | .000 | .887 | 450 | .000 |
| The visit made me happy | .272 | 457 | .000 | .760 | 457 | .000 |
| I was excited with the visit | .238 | 455 | .000 | .810 | 455 | .000 |
| The visit improved the way I am perceived by my peers | .228 | 371 | .000 | .891 | 371 | .000 |
| The visit gave me social approval from others | .188 | 367 | .000 | .900 | 367 | .000 |
| It made me feel adventurous | .247 | 418 | .000 | .878 | 418 | .000 |
| The visit satisfied my curiosity | .258 | 441 | .000 | .843 | 441 | .000 |
| **Visitor satisfaction** | | | | | | |
| I was delighted with the attraction | .291 | 461 | .000 | .811 | 461 | .000 |
| I was pleased that I decided to visit the attraction | .280 | 459 | .000 | .737 | 459 | .000 |
| The experience I had visiting the attraction exceeded my expectation | .232 | 457 | .000 | .867 | 457 | .000 |
| Visiting the attraction was exactly what I needed | .233 | 437 | .000 | .858 | 437 | .000 |
| Overall I was satisfied with the attractions offering | .260 | 450 | .000 | .788 | 450 | .000 |
| **Behavioural intentions** | | | | | | |
| I would speak highly of the attraction to friends and relatives | .262 | 455 | .000 | .771 | 455 | .000 |
| I would recommend the attraction to others | .291 | 454 | .000 | .746 | 454 | .000 |
| I would visit the attraction again | .273 | 450 | .000 | .754 | 450 | .000 |

The test produces an *F* statistic and a significance value (*p*-value). If the test is significant at $p<.05$ the null hypothesis is rejected because this indicates that the group variances cannot be treated as equal hence the assumption of homogeneity of variance has been violated. The null hypothesis is accepted if *p*-value is greater than 0.05 ($p>.05$); the group variances can be treated as equal. In this case, when Levene's test of equality of variances was performed

two of the thirty eight attraction attributes – 'Visual attractiveness' and appeal' and 'Diversity of food and drinks' were significant at $p<.05$. All the other variables in this category and the other three categories (value, satisfaction and behavioural intentions) had values greater than 0.05 signifying that the group variances can be treated as equal. Largely the criterion of homogeneity of variances was fulfilled.

#### *4.5.1.3 Independent observation*

The only assumption that cannot be violated by either parametric or nonparametric test without serious distributional properties effect is independent observation (Harwell, 1988). In statistics, independent observation denotes that the occurrence of an event does not modify the probability of the existence of another. There are two ways in which independence of observations can be conceptualised. This first one is that through research design each subject contributes only a single observation to each variable. It must however be noted that some studies are specifically designed to allow some form of non-independence and the procedure for their analysis likewise are designed for repeated measures. The second way is that data or responses are not modified by external influence.

Whilst independence of observations is a requirement of statistical analysis, the approach in achieving it is not. The approach is predicated on the manner in which the survey was carried out. Ensuring independent observation is a part of internal validity of a study and rectifying problems relating to this criterion is a

procedural matter. Reasonable study control is capable of assuring that this condition is met.

Table 4.9 Levene's Test Results

| | Levene's Test for Equality of Variances | |
|---|---|---|
| | F | Sig |
| **Performance attributes** | | |
| Working condition of physical facilities and equipment | 3.466 | .063 |
| Parking facilities | 1.379 | .241 |
| Information provided at the front desk about the attraction | .867 | .352 |
| Transport services to the site | 1.276 | .260 |
| Access for physically challenged to most part of the site | .016 | .899 |
| Smoking area | .959 | .329 |
| Effectiveness of signage and direction within the site | 1.109 | .293 |
| Availability of toilets | .321 | .572 |
| Effectiveness of written leaflets in providing enough information about the site | .027 | .869 |
| Facilities at the children's play area | .941 | .333 |
| Appearance of reception staff | 1.092 | .297 |
| Promptness of services to visitors | .537 | .464 |
| Staffs ability to provide accurate and correct information | .432 | .511 |
| Treatment of visitors in a warm and friendly way by staff members | .125 | .724 |
| Staffs knowledge of products | .087 | .768 |
| General cleanliness | 2.902 | .089 |
| Visual attractiveness and appeal | 4.395 | .037 |
| Cleanliness of restrooms | .007 | .934 |
| Ease of getting around within the site | .433 | .511 |
| Spectacular nature of the natural built surroundings | 2.206 | .138 |
| Pleasant and relaxing nature the surroundings and atmosphere | 1.813 | .179 |
| Quality of food on the site | 1.989 | .159 |
| Diversity of food and drinks | 6.988 | .009 |
| Access to souvenir store | .398 | .529 |
| Variety of choice in the souvenir store | 1.064 | .303 |
| Availability of something for everybody | .954 | .329 |

| | | |
|---|---|---|
| Opportunity to bond with family and friends | 2.382 | .123 |
| Efficiency in the way ticket is sold/delivery | .003 | .959 |
| Opportunity to learn | 1.722 | .190 |
| The use of technology | .027 | .869 |
| Information on opening hours | .198 | .657 |
| Consideration for health and safety | 1.216 | .271 |
| Entertainment | 2.528 | .113 |
| Management of waiting lines and queues are well managed | .150 | .699 |
| Opportunities to get involved and interactivity | .187 | .665 |
| Opportunity for recreation | .033 | .856 |
| Range of activities | .965 | .326 |
| Duration of activities | 3.024 | .083 |
| Acceptable standard of quality | .804 | .370 |
| **Perceived Value** | | |
| The visit was value for money | .006 | .938 |
| Admission was reasonably priced | .274 | .601 |
| The visit made me happy | .293 | .589 |
| I was excited with the visit | 1.240 | .266 |
| The visit improved the way I am perceived by my peers | .580 | .447 |
| The visit gave me social approval from others | 3.320 | .069 |
| It made me feel adventurous | .065 | .799 |
| The visit satisfied my curiosity | .671 | .413 |
| **Visitor Satisfaction** | | |
| I was delighted with the attraction | .058 | .810 |
| I was pleased that I decided to visit the attraction | .827 | .364 |
| The experience I had visiting the attraction exceeded my expectation | 2.928 | .088 |
| Visiting the attraction was exactly what I needed | .118 | .731 |
| Overall I was satisfied with the attractions offering | .072 | .788 |
| **Behavioural intentions** | | |
| I would speak highly of the attraction to friends and relatives | .066 | .797 |
| I would recommend the attraction to others | .001 | .970 |
| I would visit the attraction again | .323 | .570 |

In this study, the research was designed for each subject to contribute only a single observation to each variable. In addition, all subjects at the Blists Hill

sites completed a questionnaire individually in the presence of the researcher and his assistants. Whilst it cannot be said that the electronic questionnaires were completed individually because the researcher was not present at the point of completion, it can be assumed that individual completion was likely to have taken place owing to the fact that individuals used a personal computer to complete a questionnaire. Therefore, the assumption of independence of observation is unlikely to have been violated.

#### *4.5.1.4 Interval-level measurement*

Another criterion cited in the literature for choosing parametric test is that data under investigation must be interval level variables where the intervals between numbers are equal to each other everywhere on the scale. This requirement has proved to be very controversial in terms of its relevance and what constitutes interval level scale.

Whilst the notion of and the widely held 'knowledge' about the relationship between measurement scales and choice of statistical technique has been longstanding, the debate about the relevance of this widely held 'knowledge' is equally enduring. Writers like Gaito (1980) submit that this requirement is a mere misperception brought about by confusion between measurement theory and statistical theory.

In same vein, the debate on whether Likert scales should be treated as interval scales, capable of being analysed with parametric tests, is equally of long standing. Jamieson's (2004) commentary on this issue has fuelled the debate

further. Jamieson (2004) holds the view that Likert scales are ordinal in nature hence should be analysed using nonparametric statistics. It is argued that the weight of the empirical evidence clearly supports the position that a collection of Likert questions as a scale produces interval level data (Carifio and Perla, 2008; Norman, 2010). A number of empirical studies have also found both parametric and nonparametric tests to have similar power in the analysis of data generated by Likert scale. For example de Winter and Dodou (2010) in a study comparing the Type I and II error rates of the *t*-test versus Mann-Whitney-Wilcoxon for five-point Likert items found that the two tests generally have similar power and concluded that researchers do not have to worry about finding a difference whilst there is none in the population.

In this study, Likert and Likert variant scales were used as explained in the methodology chapter. Given the support in the literature, across a wide range of disciplines e.g. Gaito (1980) in psychology; Kozak (2001) in tourism; Norman (2010) in medical education, leaning towards the treatment of items on Likert scales as interval level data, the data collected from the attraction attribute performance, perceived value, visitor satisfaction and behavioural were treated as interval level data.

#### *4.5.1.5 Suitability of the data for parametric tests*

The foregoing discussions looked critically at the four assumptions for the adoption of parametric testing. The assumption of interval level data was met as the convergent point in the literature regarding the issue of Likert and Likert variant scales is that they are treated as interval level data. In a like manner, the

criterion of independent observation was achieved as the research was designed for each respondent to contribute only a single observation to each variable on individual basis. Further to this, the Levene's test of equality of variances also proved that thirty-six of the thirty-eight attraction attributes and all the other variables had variances that can be treated as equal. However, the normality criterion was not fulfilled.

Based on the results of the K-S and S-W tests; interpretation of the histogram and P-P plot and the examination of the skewedness and kurtosis statistics, it is observable that the conditions for normality were not met hence application of parametric test is not feasible – nonparametric test should be considered (Siegel, 1957; Harwell, 1988; Field, 2009). However, Luengo *et al.*, (2009) and Norman (2010) have noted that normality condition is not always achieved. Ryan (1995) also observed that in tourism research generally and attitudinal research particularly, scores on Likert scale are often not normally distributed because tourists are likely to have positive experience hence data are likely to be negatively skewed towards the high end of the scale.

The choice of statistical technique has always been besieged with controversies. Whilst, as mentioned above, a school of thought believes a violation of the normality or other condition will necessitate adopting nonparametric technique, the other (see for example Tabachnick and Fidell, 1996; Howell, 2009; Norman, 2010; Pallant, 2010) argues that parametric tests can still be utilised in the face of violation of normality assumption. It has been established that if a given sample size is large enough the data will be sufficient

to accommodate parametric test (Motulsky, 2009; Norman, 2010) because parametric tests are robust to deviation from normal distributions. The central limit theorem indicates that the means of large samples are normally distributed hence parametric tests perform well even if the original distribution deviate from normality assumption. Unless the population is absolutely abnormal (excessive outliers), which is not the case in this study, it is possibly safe to choose parametric tests when there are at least 24 data point in each group (Motulsky, 2009).

Motulsky (2009) concludes that with large samples, nonparametric tests are powerful and their parametric counterparts are more robust. It has been pointed out that both theory and empirical investigations converge on the conclusion that parametric methods examining differences between means for sample size greater than 5 do not require the assumption of normality and will yield nearly correct answers even in the face of massive deviation from normal and symmetric distributions. Thus, Norman (2010) concludes that parametric statistics can be used with Likert scale data with small sample sizes, with unequal variances and with non-normal distribution, without any doubt of reaching the right conclusion. Given the support of the literature for the robustness of parametric tests in the face of assumption violation and the use of parametric techniques in tourism research (see for example Kozak, 2001; Kelly and Turley 2001; Poria, Butler and Airey, 2003), this study utilised parametric techniques.

### *4.5.2 Mean differences – demographic characteristics*

The attraction attributes were assessed for differences across three demographic elements: occupation, gender and age and between the two case visitor attractions. Significant differences across attractions and gender were examined through *t*-test, and occupation and age were assessed using one-way ANOVA. The two tests indicated that significant differences existed. Table 4.10 shows the main results of the one-way ANOVA and *t*-test.

#### *4.5.2.1 Mean differences between the two attractions*

When the perception of the performance of the attraction attributes were examined, using *t*-test, comparing the perception of the two respondent groups from the two attractions, statistically significant differences were found in the perception of 25 attraction attribute performances (Table 4.10). There were no significant differences between the means of the remaining thirteen attributes; from which it can be inferred that visitors to the two attractions perceived the performances of these thirteen attributes equally.

A general trend was revealed in the results; the perception of the performance of the attributes was higher in the Blists Hill respondent group than the Alton Tower group. A closer scrutiny of the *t*-test scores revealed a variety of substantive effects ranging from high to medium to small. Generally, respondents perceived the 'management of waiting lines and queues' performed better in Blists Hill Victorian Town (M = 4.33, SE = 0.06) than Alton Towers (M = 3.38, SE = 0.07); the difference was significant $t(437) = -10.35$, $p<.05$ with large sized-effect $r = 0.57$. This particular difference is

understandable because there are minimal rides/activities to wait in line for at the Blists Hill site. On the other hand, lines for majority of the popular rides are congested even during off-peak periods. 'Cleanliness of restrooms' also performed better in Blists Hill Victorian Town (M = 4.34, SE = 0.05) than Alton Towers (M = 3.79, SE = 0.06); the difference was significant $t(454) = -6.61$, $p<.05$; it represented a medium –sized effect $r = 0.33$. In a similar light, 'facilities at the children's play area' was perceived to perform better in Blists Hill Victorian Town (M = 4.25, SE = 0.09) than Alton Towers (M = 3.98, SE = 0.07); the difference was significant $t(263) = -2.32$, $p<.05$ representing a small-sized effect $r = 0.14$. Conversely, 'opportunity to bond with family and friends' performed better in Alton Towers (M = 4.67, SE = 0.21) than in Blists Hill Victorian Town (M = 4.44, SE = 0.05) but this difference was not significant $t(457) = 1.014$, $p>.05$ with very negligible effect $r = 0.05$.

Table 4.10 Significant Differences in Alton Towers and Blists Hill Victorian Town Attraction Attributes by Respondent Characteristics

| **Attraction attributes** | **Attraction[1]** | **Occupation** | **Gender** | **Age** |
|---|---|---|---|---|
| Opportunity to bond with family and friends | _ | _ | _ | _ |
| Visual attractiveness and appeal | -3.993*** | _ | -2.823* | _ |
| Pleasant and relaxing nature of the surroundings and atmosphere | -4.067*** | _ | -2.175* | _ |
| Spectacular nature of the natural and built surroundings | _ | 2.170* | _ | _ |
| Working condition of physical facilities and equipment | -2.689** | _ | -2.121* | _ |
| Appearance of reception staff | -7.182*** | _ | _ | 4.30** |
| Staffs knowledge of products | -4.529*** | _ | _ | _ |
| Staffs ability to provide accurate and correct information | -5.919*** | _ | _ | _ |
| Treatment of visitors in a warm and friendly way by staff members | -5.037*** | 2.310* | _ | 3.66** |
| Consideration for health and safety | 2.725* | _ | _ | _ |

| | | | | |
|---|---|---|---|---|
| Entertainment | _ | _ | -2.327* | _ |
| The use of technology | 4.047*** | 2.160* | _ | 2.43* |
| Information on opening hours | _ | 3.024* | _ | _ |
| Range of activities | -2.599* | _ | _ | _ |
| General cleanliness | -6.455*** | - | _ | 2.56* |
| Promptness of services to visitors | -7.953*** | 2.216* | _ | 4.74*** |
| Effectiveness of written leaflets in providing enough information about the site | _ | _ | _ | _ |
| Access to souvenir store | _ | _ | _ | _ |
| Availability of something for everybody | _ | _ | -1.991* | _ |
| Information provided at the front desk about the attraction | -3.165** | _ | _ | _ |
| Parking facilities | -3.151** | _ | -2.622* | 2.25* |
| Efficiency in the way ticket is sold/delivery | -2.526* | _ | _ | _ |
| Ease of getting around within the site | -5.399*** | 2.395* | _ | 3.28** |
| Effectiveness of signage and direction within the site | _ | _ | -1.998* | _ |
| Opportunity for recreation | -5.657*** | _ | _ | _ |
| Variety of choice in the souvenir store | _ | _ | _ | _ |
| Availability of toilets | -2.792** | _ | _ | 3.08* |
| Duration of activities | -3.931*** | _ | _ | _ |
| Facilities at the children's play area | -2.322* | _ | -2.295* | _ |
| Cleanliness of restrooms | -6.614*** | 2.117* | _ | 6.38*** |
| Opportunities to get involved and interactivity | -7.680*** | _ | _ | _ |
| Access for physically challenged to most part of the site | _ | _ | _ | _ |
| Opportunity to learn | -13.399*** | 4.069** | -2.092* | 10.18*** |
| Quality of food on the site | _ | _ | _ | _ |
| Diversity of food and drinks | _ | _ | _ | _ |
| Transport services to the site | -2.184* | _ | _ | _ |
| Management of waiting lines and queues are well managed | -10.352*** | _ | _ | _ |
| Smoking area | _ | _ | _ | _ |

Note: Figures represent the outcomes from independent samples *t*-test and one-way ANOVA

[1]Alton Towers/Blists Hill Victorian Town.

*Significant at $p < .05$ level; ** Significant at $p < .01$ level; ** *Significant at $p < .001$ level.

#### *4.5.2.2 Mean differences in the perception of attraction attributes performance between gender groups*

A further application of the *t*-test to examine the mean differences in perception of the attraction attributes between male and female visitors revealed statistical significant differences in the perception of nine attraction attribute performances. The attributes with statistical differences were: Visual attractiveness and appeal; Pleasant and relaxing nature of the surroundings and atmosphere; Working condition of physical facilities and equipment; Entertainment; Availability of something for everybody; Parking facilities; Effectiveness of signage and direction within the site; Facilities at the children's play area and Opportunity to learn.

The *t*-test results revealed a variety of effects ranging from large to small. On average female respondents scored performance of 'Visual attractiveness and appeal' higher (M = 4.57, SE = 0.04) than male (M = 4.39, SE = 0.05); the difference was significant $t(381) = -2.82$, $p<.05$ representing a small-sized effect $r = 0.15$. Female respondents placed significantly more importance on 'Pleasant and relaxing nature of the surroundings and atmosphere' (M = 4.53, SE = 0.04) than males (M = 4.38, SE = 0.05); the difference was significant: $t(435) = -2.18$, $p<.05$, representing a small-sized effect $r = 0.10$. Regarding 'Working condition of physical facilities and equipment', females similarly gave a higher score (M = 4.50, SE = 0.04) than males (M = 4.36, SE = 0.05); the difference was significant: $t(433) = -2.12$, $p<.05$, representing a small-sized effect $r = 0.10$.

Other scores yielded similar effect and on the whole females gave higher mean scores than males in majority of the attributes except in some few instances where p>.05. Findings on statistical difference on the basis of gender in tourism studies are quite mixed and relate little to visitor attractions. Jonsson and Devonish, (2008) in travel motivation investigation found no significant difference in male and female motivation to travel. Baloglu and McCkeary (1999) and Chen and Kerstetter (1999) conversely found that gender and age significantly affect the perception of destination image. Spinks *et al* (2005) in visitor attraction satisfaction study found that females showed significantly higher levels of satisfaction than males. The findings in this study indicated that significant gender differences in the perception of attraction attribute performance were obtainable. This reflects what generally holds in the tourism literature that females show significantly higher levels of perception of destination/attraction attribute than males (Meng and Uysal, 2008). However, only minimal research findings relating specifically to attraction attribute performance and quality were available to compare this study's findings with.

#### *4.5.2.3 Mean differences in the perception of attraction attribute performance between occupation groups*

A one-way ANOVA was conducted to assess whether visitor attraction attributes differ significantly by occupation. Further to this, a Tukey post hoc test was conducted to investigate which occupation group differed significantly in the perception of attraction attribute performance. The results show that occupation of visitors had a significant effect on eight attributes (see Table 4.13).

There was a significant effect of occupation on perception of ‘Opportunity to learn’, $F(6, 361) = 4.07$, $p<.05$, w = 0.22. Equally, occupation had a significant effect on ‘Information on opening hours’ $F(6, 392) = 3.02$, $p<.05$, w = 0.17. There was also a significant effect on ‘Ease of getting around within the site $F(6, 414) = 2.40$, $p<.05$, w = 0.14. ‘Promptness of services to visitors also had a small effect $F(6, 407) = 2.22$, $p<.05$, w = 0.13. Four other attributes (‘The use of technology’; ‘Treatment of visitors in a warm and friendly way by staff members’; ‘Cleanliness of restroom’ and ‘Spectacular nature of the natural and built surroundings) showed similar effects. In this sense, the ANOVA revealed that occupation of attraction visitors had significant effect on some of the attraction attributes. Post hoc test revealed that visitors in Social grade C1 reported significantly stronger perception of ‘Opportunity to learn’ than visitor in Social grade A. In addition, visitors who are students showed more inclination for ‘Opportunity to learn’ than visitors who are in Social grades A and C1.

The post hoc test also revealed that there was significant difference in the perceptions of ‘Cleanliness of restrooms’ between visitors in social grade C1 and social grade A as well as between students and visitors in social grade C1. Visitors in social grade C1 perceived ‘Cleanliness of restrooms’ higher than visitors in social grade A. Students in turn perceived the performance of this attribute higher than did visitors in social grade C1. Visitors in social group A tended to perceive ‘Spectacular nature of the natural and built surroundings’ as more important than visitors in social grades C1, C2 and D. Visitors in social

group B also perceived the performance of this attribute higher than visitors in social groups A and C1. Students and visitors in social group C2 perceived the performance of this attribute higher than visitors in social group B.

Other interesting result of the post hoc test relate to 'The use of technology' and 'Information on opening hours'. Social group A indicated that 'The use of technology' performed better than did social group B. Regarding 'Information on opening hours' social group D rated the performance of the attribute higher that social group A whilst students rated the 'Information on opening hours' higher than visitors in social group D.

#### *4.5.2.4 Mean differences between age groups*

Age was measured through categorical variable with groupings of 18-24, 25-34, 35-44, 45-54, 55-64 and 65 and over. Again, one-way ANOVA was conducted to examine the significant differences in the performance of the attraction attributes on the basis of age. The results show that age of visitors had a significant effect on ten attributes (see Table 4.13). There was a significant effect of age on perception of 'Cleanliness of restrooms', $F(5, 409) = 6.38$, $p<.05$, w = 0.25. Also there was a significant effect of age on perception of the performance of 'Opportunity to learn', $F(5, 378) = 10.18$, $p<.05$, w = 0.35. 'Promptness of services to visitors' also indicated statistical significant difference $F(5, 430) = 4.73$, $p<.05$, w = 0.20. 'Appearance of reception staff' $F(5, 434) = 4.30$, $p<.05$, w = 0.19; 'Treatment of visitors in a warm and friendly way by staff members' $F(5, 430) = 3.66$, $p<.05$, w = 0.17 and 'Availability of toilets' $F(5, 434) = 4.30$, $p<.05$, w = 0.15.

In addition, a Tukey post hoc multiple comparison test was also conducted to explore how significantly age groups differed in the perception of attraction attribute performance. The post hoc test indicated that 'Appearance of reception staff' was significantly more important for visitors in the 18-24 age group that for age group 65 and above. Also age group 55-64 attach more importance to this attribute than age group 25-34. 'Promptness of services to visitors' was also significantly more important for age group 35-44 than age group 25-34. Likewise age group 55-64 attach more importance to this attribute than age group 25-34. There was significant difference in the perceptions of 'Treatment of visitors in a warm and friendly way by staff members' between age groups 18-24 and over 65 as the former tends to attach much importance to this attribute. 55-64 group also tend to rate this higher than age group 25-34. 'Cleanliness of restrooms' yielded very interesting results as age group 18-24 view this attribute as more important than did groups 35-44 and over 65s. In the same vein, age group 25-34 viewed this as more important than age group 35-44, and 55-64 more than 25-34. Another interesting multiple comparisons results relate to the 'Management of waiting lines and queues' attribute. Age group 18-24 placed much importance to the performance of this attribute that other groups except for age group 25-34 and 35-44. Age group 25-34 in turn viewed this as more important than age group 18-24, and 35-44 more than 25-34. In addition, age group 25-34 placed less importance on this attribute than all other groups except age group 18-24.

These findings are consistent with the literature and support the argument that service quality and its attributes and dimensions vary across service context and amongst categories of people (Dabholkar *et al.*, 2000; Kelly and Turley, 2001; Olorunniwo and Hsu, 2006). The results suggest that different categories of visitors place different emphasis on attraction attributes and their performance. The analysis shows that the attraction attributes were not perceived equally by subjects of differing demographic categories that participated in this study. This findings has a marketing implication as attraction managers and marketers would need to monitor various segments of the market to ensure that attributes whose performance are considered important by different categories of visitors are managed in accordance to visitors' expectations.

## 4.6 Exploratory Factor analysis

A principal component analysis (PCA) was conducted in order to ensure that a number of factors capable of yielding the most interpretable results were obtained.

### *4.6.1 Test for sphericity and sampling adequacy*

The suitability of data for exploratory factor analysis was tested utilising Barlett's test and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. Barlett's test of sphericity was employed first to test for inter-correlation. KMO measure of sampling adequacy was also applied to ensure that the variables were grouped appropriately. The KMO overall measure for sampling adequacy was calculated as 0.884. According to Kaiser (1974) a score of 0.80 and above

is acceptable; however, authors like Field (2009) indicate that 0.5 is an acceptable limit. Since the KMO was above 0.80, the variables were interrelated and they share common factors. In addition to this, Barlett's test of sphericity $x^2$ (253) = 2357.547, $p$<001 indicated that correlations between items were large enough to accommodate principal component analysis. In essence the fulfilment of the two tests signified that factor analysis was feasible and the data were suitable for factor analysis (Hair *et al.*, 2009). Table 4.11 below shows the result of KMO and Bartlett's tests.

Table 4.11 KMO and Bartlett's Test

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .886 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2357.547 |
| | df | 253 |
| | Sig. | .000 |

### *4.6.2 Principal Components Analysis (PCA) – attraction attributes*

Using Principal Components Analysis (PCA) with Promax oblique rotation and Kaiser normalization, 38 attraction attributes were factor analysed to identify the underlying dimensions that describe the variance in the attributes. Based on the Promax rotation, 23 out of the original 38 attributes culminated to six factors representing 70% of the explained variance (see Table 4.12). The six factors have a loading value of more than 0.5 hence all factors were retained on this basis.

In addition to high loading values, the factors also proved to be highly internally consistent. The reliability of factors was tested using Cronbach's alpha. The test resulted in alpha coefficients that range from 0.70 to 0.87.

These were higher than the recommended minimum value in the literature. Nunnally and Bernstein (1994) indicated 0.7 as an acceptable reliability coefficient for social science research but lower baseline, as much as 0.50, (see for example Choi and Chu, 1999) have been used for accepting test of reliability. All the factors had eigenvalues greater than or equal to 1.0 this helped in deciding the factors to be included in the analysis as suggested by Gorsuch (1983). Tabachnick and Fidell (1996) recommend that eigenvalues lower than 1.0 or with negative values should not be included in the analysis. In this analysis items eigenvalues with lower-than-1.0 or negative values were not included. Communality is the measure of the proportion of each variable's variance that can be explained by the factors. The communality values indicated that all the variables account for more than 60% variance in each factor with the exception of 'Entertainment'.

The six factors identified are as follows: Factor 1 - activities, Factor 2 - staff attributes, Factor 3 - operations and environment, Factor 4 - retail, Factor 5 - access and Factor 6 - ease of use. Factor 1 consisted of five attributes and explained 38.7% of the variance in the data with an eigenvalue of 8.9. This factor had items that were associated with activities and opportunity to get involved in activities. Factor 2 contained four items that described staff efficiency and politeness and this accounted for 8.3% of the variance in the data. Factor 3 explained 6.95% of the variance and addressed characteristics relating to physical setting and operations such as the use of technology and consideration for health and safety. Factor 4 revolved round retail attributes and explained 6.08% of the variance.

Table 4.12 Factor Analysis Results of Visitor Attractions Quality Attributes

| Attraction attributes | Factors | | | | | | Communality |
|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| **Factor 1: Activities** | | | | | | | |
| Opportunities to get involved and interactivity | 0.923 | | | | | | .779 |
| Opportunity for recreation | 0.848 | | | | | | .738 |
| Duration of activities | 0.818 | | | | | | .680 |
| Range of activities | 0.703 | | | | | | .809 |
| Entertainment | 0.501 | | | | | | .586 |
| **Factor 2: Staff attributes** | | | | | | | |
| Staff's knowledge of products | | 0.905 | | | | | .783 |
| Treatment of visitors in a warm and friendly way by staff members | | 0.789 | | | | | .745 |
| Staff's ability to provide accurate and correct information | | 0.786 | | | | | .729 |
| Promptness of services to visitors | | 0.752 | | | | | .633 |
| **Factor 3: Operations and environment** | | | | | | | |
| Information on opening hours | | | 0.824 | | | | .702 |
| Consideration for health and safety | | | 0.796 | | | | .756 |
| The use of technology | | | 0.761 | | | | .643 |
| Spectacular nature of the natural and built surroundings | | | 0.699 | | | | .606 |
| **Factor 4: Retail** | | | | | | | |
| Diversity of food and drinks | | | | 0.940 | | | .791 |
| Quality of food on the site | | | | 0.906 | | | .824 |
| Access to souvenir store | | | | 0.647 | | | .688 |
| Variety of choice in the souvenir store | | | | 0.630 | | | .730 |
| **Factor 5: Access** | | | | | | | |
| Information provided at the front desk about the attraction | | | | | 0.749 | | .668 |
| Parking facilities | | | | | 0.742 | | .607 |
| Access for physically challenged to most | | | | | 0.673 | | .606 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| part of the site | | | | | | | |
| **Factor 6: Ease of use** | | | | | | | |
| Effectiveness of signage and direction within the site | | | | | | 0.734 | .682 |
| Effectiveness of written leaflets in providing enough information about the site | | | | | | 0.733 | .672 |
| Availability of toilets | | | | | | 0.665 | .687 |
| **Eigen value** | 8.91 | 1.91 | 1.60 | 1.40 | 1.32 | 1.01 | |
| **Variance (%)** | 38.74 | 8.28 | 6.95 | 6.08 | 5.75 | 4.41 | |
| **Cumulative variance (%)** | 38.74 | 47.02 | 53.96 | 60.04 | 65.79 | 70.20 | |
| **Cronbach's Alpha** | 0.87 | 0.87 | 0.79 | 0.80 | 0.70 | 0.76 | |
| **Number of items** | 5 | 4 | 4 | 4 | 3 | 3 | |

Three attributes associated with access made up Factor 5 and this factor explained 5.75% of the variance. The last factor 'Ease of use' – Factor 6 was associated with effectiveness of signage, availability of toilets and effectiveness of written information about the site. This factor explained 4.41% of the variance. Table 4.12 shows the results of the factor analysis used in determining the underlying attraction factors at the Blists Hill and Alton Towers sites.

### *4.6.2 Principal Components Analysis (PCA) – perceived value*

An exploratory factor analysis was also conducted to identify the underlying factors that describe the variance in the construct - perceived value. Again, using Principal Components Analysis (PCA) with Promax oblique rotation eight value items were analysed (Table 4.13). Respondents were requested to indicate their level of agreement with the eight items on a 5 point Likert scale

labelled ‘Strongly Disagree’, ‘Disagree’, ‘Neither Agree Nor Disagree’, ‘Agree’, and ‘Strongly Agree’. As stated in sub-section 3.8.2.1 the value items were derived from Sweeney and Soutar (2001). The eight attributes used in measuring perceived value produced three factors representing 81% of the explained variance. All the factors had a loading value of more than 0.66.

The three factors identified are as follows: Factor 1 – social and personal value consisting of four items with highest factor loading of 0.966 and lowest value of 0.667. Factor 2 – monetary value had two items with factor loading of 0.956 and 0.789. Factor 3 – emotional value also consisted of two items with factor loading of 0.90 and above. Table 4.13 shows details of the results of the factor analysis. The dimensions that emerged from the factor analysis confirmed Sweeney and Soutar’s (2001) PERVAL scale. However, in this study, quality dimension was not included in the measure (as done in Sweeney and Soutar’s (2001) and similar value studies) because performance of the attraction attributes was measured separately. Gallarza and Saura (2006) found out that efficiency (performance and quality dimension) which is often included in value measurement is an antecedent of loyalty hence queried its inclusion in value measure rather than being integrated into perceived quality measurement. It was pointed out that there is a need for clarity in this area hence how much performance of attraction attributes explains perceived value was explored in this study.

Table 4.13 Factor Analysis Results of Perceived Value

| Attraction attributes | Factors | | | Communality |
|---|---|---|---|---|
| | 1 | 2 | 3 | |
| **Factor 1: Social and Personal value** | | | | |
| The visit gave me social approval from others | 0.966 | | | .843 |
| The visit improved the way I am perceived by my peers | 0.926 | | | .809 |
| It made me feel adventurous | 0.778 | | | .725 |
| The visit satisfied my curiosity | 0.667 | | | .661 |
| **Factor 2: Monetary value** | | | | |
| Admission was reasonably priced | | 0.956 | | .895 |
| The visit was value for money | | 0.789 | | . 875 |
| **Factor 3: Emotion value** | | | | |
| I was excited with the visit | | | 0.918 | .851 |
| The visit made me happy | | | 0.903 | .837 |
| **Eigen value** | 4.20 | 1.29 | 1.00 | |
| **Variance (%)** | 52.52 | 16.17 | 12.52 | |
| **Cumulative variance (%)** | 52.52 | 68.69 | 81.21 | |
| **Cronbach's Alpha** | 0.88 | 0.88 | 0.83 | |
| **Number of items** | 4 | 2 | 2 | |

## 4.7 Predicting the relationship between attraction quality, perceived value, visitor satisfaction and behavioural intentions

To examine the influence of perceived service quality, perceived value and visitor satisfaction on behavioural intentions, multiple regression analysis was conducted. The predictive power of each of the variables was analysed and compared in a set of regression models testing both direct and indirect relationships.

### 4.7.1 Justification for the use of multiple regression

The main purpose of regression is to analyse the relationship between metric independent variables and a metric dependent variable. In addition, where there is existence of a relationship, the information derived from independent variables enables prediction of the value for dependent variable at any given

point. Multiple regression allows a number of explanatory variables to combine in explaining an independent variable (Tabachnick and Fidell, 2007). There are three types of multiple regression: standard; hierarchical and stepwise. Standard multiple regression in the main is employed in evaluating the relationship between a dependent variable and a group of independent variables; this was used in this research to examine the direct relationship between independent (predictor) variables and one dependent variable eg relationship between attraction attributes and overall quality. Hierarchical regression is used in exploring relationships between a dependent variable and a group of independent variables by first controlling the influence of mediating independent variables on the dependent variable. This type of regression was used to assess relationship caused by a mediating variable between independent variables and a dependent variable. The third type of regression analysis, stepwise, is used in identifying subsets of independent variables that have the most compelling relationship on a given dependent variable.

Stepwise regression analysis was not used in this study. Huberty (1989) pointed out that stepwise regression can be used in one of the three following ways: 1) selection or reduction of variables; 2) examination of relative variable importance and 3) combination of 1 and 2. The nature of this investigation did not warrant ordering or selection of best subsets of independent variables to predict the dependent variable. Apart from the fact that the method does not suit this study, stepwise regression has been criticized severally. It has been questioned whether there is a single best subset that can explain the variability in a dependent variable or rather there are several equally good ones (Hocking,

1960 in Han and Leitner, 1994). Mantel (1970) also contends that there is possibility of ignoring an excellent model as a result of the restriction stipulated by the method of adding only one variable at a time. To this end, stepwise regression was not used in this study.

Application of multiple regression is based on a number of assumptions (Tabachnick and Fidell, 2007; Osborne and Waters, 2002) and it is imperative to ascertain that the assumptions were satisfied before subjecting the data to regression analysis (Osborne and Waters, 2002). Field (2009) warns that regression analysis assumptions should be given consideration, to ascertain whether the model fit the observe data and is genralisable to other samples. It is not only important to verify the assumptions before the analysis but to also test the assumptions after the model has been estimated. The following assumptions, issues and conditions of regression analysis were examined: normal distribution of error, linear relationship between the independent and dependent variables, error-free measurement, independence of error, multicollinearity and homoscedasticity of residuals.

The assumption of normal distribution of error assumes that the residuals in the model are random, normally distributed variable with a mean of 0. The issue of distribution of error has been explored in section 4.5.1.1 and will not be replicated here. According to Osborne and Waters (2002) standard multiple regression can only correctly estimate the relationship between a dependent variable and predictors if the relationship is linear. Linearity denotes that the mean values of the dependent variable for each increment of the independent

variable(s) lie along a straight line (Field, 2009). Osborne and Waters (2002) highlight three methods used in detecting non-linearity in the literature – 1) the use of theory, 2) examination of residual plot and 3) running regression analyses that incorporate curvilinear components or using a nonlinear regression option. The first method was adopted in this study as there is ample empirical evidence in the literature that point to the linear link between service quality, value, satisfaction and behavioural intentions (see for example Bolton and Drew, 1991; Taylor, 1997; Cronin *et al.*, 2000). Studies (eg Finn, 2011; Fullerton and Taylor, 2009) that have made attempts to investigate non-linearity of the relationship between service quality and satisfaction have proved inconclusive.

Another regression assumption is error-free measurement which denotes the accurate measurement of the independent and the dependent variables. Osborne and Waters (2002) note that the nature of social science research indicates that many variables of interest are complex to measure which makes measurement error (reliability) a particular concern. Any error in the measurement of the predictor and outcome variables will bias the estimates. Where the goal of a research is to mirror the 'real' relationship obtainable in the population, over-estimation and/or under-estimation will be a major concern. Error of measurement was not of particular concern in this study as the reliability estimate (Cronbach's alpha) was above the threshold limit of 0.7 (Nunnally and Bernstein, 1994).

The assumption of independence of error of prediction can be tested with Durbin-Watson statistic where a significant test indicates non-independence of error. The test score can range from 0 to 4. A test score between 1 and 3 indicates independence of error (Field, 2009). This test was employed in the study to ascertain independence of error. The test statistics were indicated in all regression tables and all scores were between 1 and 3.

High intercorrelation among the independent variables with no complete linear dependency is known as multicollinearity. A correlation matrix is useful in detecting the existence of high correlation between independent variables. Tabachnik and Fidell (2007) indicate that a high correlation coefficient of 0.7 and above signifies a problem. In addition to this, the tolerance and variance inflation factor (VIF) statistics also provide indications for high intercorrelation in the data. In general, the VIF cutoff threshold would be 10 (Hair *et al.*, 2009). A tolerance statistic below 0.10 indicates multicollinearity amongst the independent variables (Pallant, 2010). Multicollinearity is a fairly common problem in empirical work; however, the use of factors as predictors can minimise the issue of collinearity (Hair *et al.*, 2009; Yoon and Uysal, 2005). All the attraction factors (dimensions) had tolerance statistic above 0.10 and VIF within 1-10 (see Table 4.14).

Finally, the assumption of homoscedasticity also is a vital one to satisfy when using regression analysis. Homoscedasticity denotes the equality of variance of residue term across all level of the independent variable. Homoscedasticity is indicated when the variance of errors are unequal at different values of the

predictor variable (Pallant, 2010). Visual examination of the standardised residual scatterplot can facilitate assessment of homoscedasticity. Homoscedasticity is depicted by non-evenly scattered residual around the line (Osborne and Waters, 2002). The scatterplots were visually examined and in all the cases the residuals were scattered unevenly around the line.

### 4.7.2 Predicting quality through the performance of attraction attributes

Overall attraction quality was measure on a five point Likert scale with a single item that asked respondents to rate the acceptability of the standard of quality. Responses ranged from strongly disagree to strongly agree that the standard of quality was acceptable. 91% were on the 'Agree' and 'Strongly Agree' categories and the mean was 4.14. In order to investigate the impact of the attraction Factors on overall attraction quality, the Overall Quality score was regressed against the six extracted attraction factors. Table 4.14 shows the results of the regression analysis which indicated that attraction Factors had a positive impact on Overall Quality. In regression analysis, $R^2$ is the commonly used standard for judging prediction models and regression coefficients are often the indicators of the relative importance of variables (Han and Leitner, 1994). Further to this, Huberty (1989) recommended adjusted $R^2$ for determining the final subset of independent variables. To this end, in this analysis, two measures, adjusted $R^2$ and regression coefficients, were used in determining regression model fitness and variables' relative importance. An adjusted $R^2$ of 0.38 indicates that 38% of the overall quality was explained by the six attraction factors. The findings were consistent with the literature that visitor perception of attribute performance influences perception of service

quality (Zabkar *et al.*, 2010; Cole *et al.*, 2002). Thus Hypothesis 1 (*H1*) was supported. Further examination of the β coefficients show that Factor 1 – activities (β = .30, $p$<.001) exerts more influence on quality than other factors followed by Factor 4 – Retail (β = .16, $p$<.05). Only Factors 1 - activities and 4 - Retail were statistically significant at the 95% confidence level.

Table 4.14 Regression of Overall Quality on Attraction Factors

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .63 | .40 | .38 | 6 | 18.57 | .000 | 1.94 |

| Regression coefficient | | | | | | | |
|---|---|---|---|---|---|---|---|
| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .205 | .054 | .30 | 3.802 | .000 | .586 | 1.706 |
| Factor 2: Staff attributes | .056 | .049 | .08 | 1.147 | .253 | .664 | 1.505 |
| Factor 3: Operations and environment | .088 | .054 | .123 | 1.633 | .104 | .626 | 1.596 |
| Factor 4: Retail | .106 | .049 | .158 | 2.138 | .034 | .659 | 1.518 |
| Factor 5: Access | .076 | .045 | .115 | 1.676 | .096 | .766 | 1.305 |
| Factor 6: Ease of use | .062 | .048 | .089 | 1.300 | .195 | .765 | 1.307 |

### 4.7.3 Predicting perceived value through the performance of attraction attributes

Table 4.15 presents the results of the regression analysis between attraction Factors and the Index of Overall Value as the dependent variable. The Index of Overall Value is the computed mean score of the value variables. When Overall Value was regressed on the six attraction factors 44% of value was explained by the factors. Thus Hypothesis 2 (*H2*) was supported.

The β coefficients show that Factor 1 – activities exerts more influence on value than other factors. Only Factors 1 - activities, 2 - Staff attributes and 4 - Retail are statistically significant at the 95% confidence level.

Examination of the individual value variables against the attraction factors on one hand and value factors against the attraction factors on the other confirmed that the activities dimension exerts the highest influence on value. When all the eight value variables were individually regressed on the six attraction factors the β coefficients show that Factor 1 – activities was statistically significant at the 95% confidence level in all cases. Furthermore, the results of the regression of all the three value factors when individually regressed with the six attraction factors also show that Factor 1 – activities was statistically significant at the 95% confidence level in all the cases (see Appendix 1 for the results). The data suggest that visitors' perception of value is influenced by activities at both the Alton Towers and Blists Hill Victorian Town visitor attractions. This result is in line with Patterson and Spreng (1997) study in business-to-business context that found one dimension of performance – outcome the most important in explaining value and satisfaction. This suggests that mangers and developers of visitor attractions need to investigate and device activities that will enhance visitors' perception of value. It must be noted that this is an area that is seldom researched in tourism; there is a need for further investigation in this area. Other attraction dimensions have substantial impact, and therefore considered as also important; they should thus not be overlooked in product and marketing strategy development. Again, whether activities will fit into Swarbrooke's (2002) or Wanhill's (2008) attraction product models as the core or

servicescape respectively, or will span many boundaries is another area for investigation.

Table 4.15 Regression of the Index of Overall Value on Attraction Factors

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .680 | .463 | .444 | 6 | 24.140 | .000 | 1.903 |

| Regression coefficients | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
| Model | B | Std. Error | β | t | Sig. | Tolerance | VIF |
| Factor 1: Activities | .303 | .052 | .430 | 5.821 | .000 | .586 | 1.706 |
| Factor 2: Staff attributes | .124 | .047 | .183 | 2.639 | .009 | .664 | 1.505 |
| Factor 3: Operations and environment | .056 | .052 | .077 | 1.080 | .282 | .626 | 1.596 |
| Factor 4: Retail | .106 | .048 | .155 | 2.221 | .028 | .659 | 1.518 |
| Factor 5: Access | -.017 | .044 | -.025 | -.383 | .702 | .766 | 1.305 |
| Factor 6: Ease of use | .019 | .046 | .027 | .418 | .677 | .765 | 1.307 |

### 4.7.4 Predicting the effect of perceived value of the attraction on visitor satisfaction

To analyse the impact of perceived value on visitor satisfaction, Overall Satisfaction was first regressed on the Index of Overall Value (Table 4.16). Overall visitor satisfaction was further regressed on the three value Factors – Social and Personal value, Monetary value and Emotional value (Table 4.17). Firstly, Overall Value explains 36% of the variability in Overall Satisfaction. Secondly, the result shows that Overall Value has a meaningful influence on visitors' satisfaction (β – .60). The results of the regression of overall visitor satisfaction on the three value Factors yielded a slightly higher variability,

reaching approximately 37%. The results of the β coefficient further indicate that Social and Personal value, Monetary value and Emotional value all explain 37% of the variability with Emotional value exerting the most influence (β – .42). All coefficients used in the model were statistically significant at the 95% confidence level. This finding reflects Sweeney and Soutar (2001) assertion that consumers assess product not only from functional or performance, value for money and usefulness bases; but also in terms of pleasure derived from the product (Emotional value) and social imports of the product communicated to families, friends and other acquaintances (Social value). This is also consistent with Chen and Hu's (2010) findings in their study of coffee outlet industry.

Table 4.16 Regression of Overall Satisfaction on the Index of Overall Value

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .601 | .361 | .360 | 1 | 251.434 | .000 | 1.992 |

| Regression statistics | | | | | | |
|---|---|---|---|---|---|---|
| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics |
| | B | SE | β | | | Tolerance VIF |
| Index of overall value | .670 | .042 | .601 | 15.857 | .000 | 1.000 1.000 |

Table 4.17 Regression of Overall Satisfaction on Value Factors

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .610 | .373 | .367 | 3 | 65.152 | .000 | 2.013 |

| Regression coefficients | | | | | | |
|---|---|---|---|---|---|---|
| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics |
| | B | SE | β | | | Tolerance VIF |
| Social and Personal value | .110 | .044 | .138 | 2.493 | .013 | .619 1.616 |
| Monetary value | .118 | .040 | .153 | 2.964 | .003 | .719 1.390 |
| Emotional value | .349 | .047 | .423 | 7.396 | .000 | .584 1.712 |

Furthermore, when all the eight value variables were individually regressed with overall satisfaction, a somewhat similar but higher result was obtained with the eight value variables explaining 40% of the variability in Overall Satisfaction (see Table 4.18). Given the conservative results obtained in this study, the findings reflect the general agreement in the literature; see for example Lee *et al* (2007) and Cronin *et al* (2001), that tourists' perceived value is a significant predictor of satisfaction. Thus Hypothesis 3 (*H3*) was supported.

Table 4.18 Regression of Overall Satisfaction on Value Variables

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .650 | .423 | .409 | 8 | 29.670 | .000 | 2.048 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| VAL1 The visit was value for money | .208 | .051 | .286 | 4.055 | .000 | .358 | 2.790 |
| VAL2 Admission was reasonably priced | -.039 | .047 | -.058 | -.833 | .405 | .374 | 2.673 |
| VAL3 The visit made me happy | .367 | .072 | .320 | 5.117 | .000 | .455 | 2.199 |
| VAL4 I was excited with the visit | .034 | .063 | .034 | .533 | .594 | .443 | 2.260 |
| VAL5 The visit improved the way I am perceived by my peers | -.012 | .058 | -.016 | -.215 | .830 | .305 | 3.280 |
| VAL6 The visit gave me social approval from others | .065 | .057 | .089 | 1.141 | .255 | .290 | 3.453 |
| VAL7 It made me feel adventurous | .030 | .049 | .038 | .599 | .550 | .440 | 2.272 |
| VAL8 The visit satisfied my curiosity | .128 | .055 | .145 | 2.344 | .020 | .463 | 2.162 |

### 4.7.5 Predicting the influence of perceived quality of the attraction on visitor satisfaction

In order to investigate the influence of the perceived quality of the attractions on visitor satisfaction, Overall Satisfaction was regressed against Overall Quality (see Table 4.19). The result of the analysis supports the view that quality influence satisfaction with 28% of Overall Quality explaining the variability in Overall Satisfaction ($\beta = 0.53$, $p<.001$).

Table 4.19 Regression of Overall Satisfaction on Overall Quality

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .530 | .281 | .279 | 1 | 172.747 | .000 | 1.995 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Overall quality | .608 | .046 | .530 | 13.143 | .000 | 1.000 | 1.000 |

In addition to the above regression, four further regression models were run assessing the impact of Overall Quality on 'I was delighted with the attraction' (SAT 1), 'I was pleased that I decided to visit the attraction' (SAT 2), 'The experience I had visiting the attraction exceeded my expectation' (SAT 3) and 'Visiting the attraction was exactly what I needed' (SAT 4). Overall Quality explained the following variances in the four satisfaction measures: SAT 1 – 32%, SAT 2 – 25%, SAT 3 – 32% and SAT 4 – 25%. All the satisfaction variables were significant at 95% confidence level (see Table 4.20 – 4.23) further supporting the existence of quality-satisfaction relationship. This finding however, is a complete departure from Gallarza and Saura's (2006) work that found no link between service quality and satisfaction and Bolton

and Drew (1991) who modelled satisfaction as an antecedent to service quality. The vast majority of studies in this area (e.g. Taylor and Baker, 1994; Brady *et al.*, 2002; Cole and Illum, 2006; Zabkar *et al.*, 2010) support the quality-satisfaction order; moreover, Brady *et al* (2005) contend that this order is obtainable irrespective of setting/context. Therefore, Hypothesis 4 (*H4*) was accepted.

Table 4.20 Regression of SAT 1 on Overall Quality

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .565 | .319 | .317 | 1 | 211.666 | .000 | 1.891 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Overall quality | .670 | .046 | .565 | 14.549 | .000 | 1.000 | 1.000 |

Table 4.21 Regression of SAT 2 on Overall Quality

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .501 | .251 | .249 | 1 | 150.942 | .000 | 1.966 |

Regression coefficients

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | | SE | β | | | Tolerance | VIF |
| Overall quality | .501 | .041 | .501 | 12.286 | .000 | 1.000 | 1.000 |

Table 4.22 Regression of SAT 3 on Overall Quality

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .565 | .319 | .317 | 1 | 150.942 | .000 | 1.891 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Overall quality | .670 | .046 | .565 | 14.549 | .000 | 1.000 | 1.000 |

Table 4.23 Regression of SAT 4 on Overall Quality

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .501 | .251 | .249 | 1 | 150.942 | .000 | 1.966 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Overall quality | .501 | .041 | .501 | 12.286 | .000 | 1.000 | 1.000 |

### 4.7.6 Predicting the influence of attraction attribute performance on visitor satisfaction through the mediating effect of perceived value

Baron and Kenny's (1986) procedure and Sobel (1982) statistic were carried out in testing hypothesis five – *H5*. Baron and Kenny's (1986) procedure to assess the mediating effect of variables is as follows: (1) the independent variable significantly affects the mediator, (2) the independent variable significantly affects the dependent variable, and (3) the mediator variable affects the dependent variable when both the independent and the mediator variable are in the model. If these conditions manifest in the hypothesized direction, then the influence of the independent variable on the dependent variable should be less in the third regression equation than in the second (Baron and Kenny 1986). Further to this, perfect mediation exists if the independent variable has no influence on the dependent variable when the mediator is controlled. The effect of the variable, perceived value of the attractions mediating the effect of attraction attribute performance (independent variable) on visitor satisfaction (dependent variable) was assessed employing the above procedures.

The results of the procedures are shown in Table 4.24 and Figure 4.5. In the evaluation, regression analysis showed that the influence of attraction attribute

performance on perceived value was significant ($t$ = 10.57, $p$ < .001). In the same vein, the influence of attraction attribute performance on overall visitor satisfaction was significant ($t$ = 10.50, $p$ < .001). Additionally, perceived value significantly affected overall satisfaction ($t$ = 6.61, $p$ < .001), and attraction attribute performance in the same equation also influenced overall satisfaction significantly ($t$ = 4.57, $p$ > .001). This indicates partial mediation (Baron and Kenny 1986).

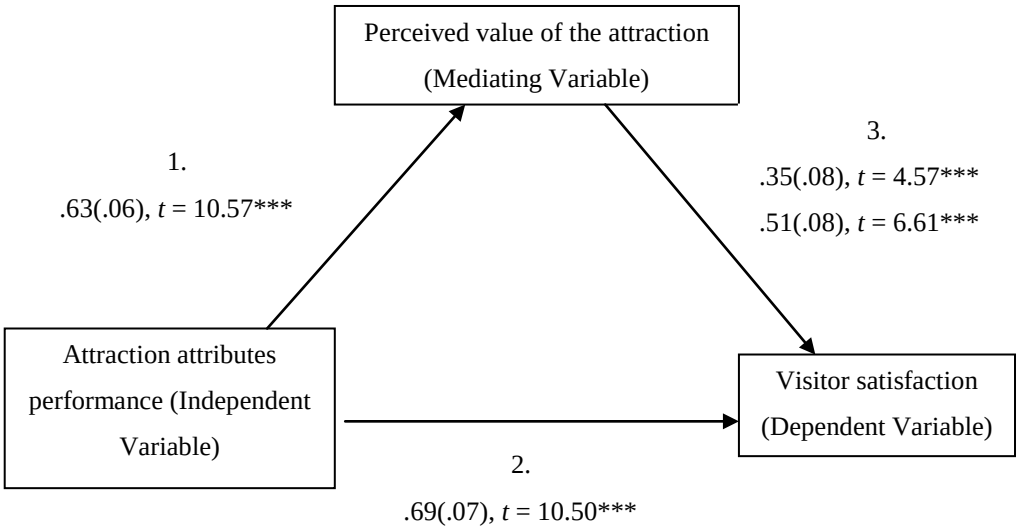


Figure 4.2 Perceived Value Mediation Model 1 after Baron and Kenny (1986)

Table 4.24 Value Mediation Analysis

| **Predictor** | **B** | **SE B** | ***t*** |
|---|---|---|---|
| Predicting perceived value | | | |
| Attraction attribute performance | .63 | .06 | 10.57*** |
| Predicting visitor satisfaction | | | |
| Attraction attribute performance | .69 | .07 | 10.50*** |
| Predicting visitor satisfaction | | | |
| Attraction attribute performance | .35 | .08 | 4.57*** |
| Perceived value | .51 | .08 | 6.61*** |
| Sobel test | 5.45*** | | |

***$p$< .001

Further to the use of Baron and Kenny's (1986) procedure, the indirect influence of attraction attribute performance on satisfaction through perceived value was also tested using the Sobel (1982) test, because this test explicitly assesses the significance of mediation effects. The Sobel test entails running of two regressions: (1) with perceived value as the dependent variable and attraction attribute performance as the independent variable and (2) with overall visitor satisfaction as the dependent variable and attraction attribute performance and perceived value as the independent variables. A test statistic with a normal distribution was derived using the unstandardized coefficients and the standard errors from the two regressions. The statistical significance of this test statistic was then evaluated. As shown in Table 4.24, the mediation effect of perceived value on attraction attribute performance and overall visitor satisfaction was significant $p < .001$. Therefore, Hypothesis 5 was supported.

In summary, the Sobel (1982) test showed that perceived value mediated the effect of attraction attribute performance on overall visitor satisfaction. Baron and Kenny's (1986) procedure indicated a partial mediation effect. Therefore, Hypothesis 5 was supported. The partial mediating effect means that, attraction attribute performance had some direct effect on overall visitor satisfaction.

### 4.7.7 Predicting the influence of perceived service quality on behavioural intentions through the mediating effect of perceived value of the attraction

This sections aims to examine the influence of perceived service quality on behavioural intentions through the mediating effect of perceived value (hypothesis 6 – *H6*). The mediating effect of perceived value of the attraction

was tested adopting Baron and Kenny's (1986) and Sobel's (1982) statistics as above. In the regression analysis, behavioural intention was the dependent variable and perceived service quality and value were the independent variables.

The results displayed in Figure 4.6 and Table 4.25 show significant relationships between the independent variables and the dependent variable in all the three regression equations. The first regression analysis showed that the influence of perceived service quality on perceived value was significant ($t$ = 13.66, $p$ < .001). The second regression also indicated that the influence of perceived service quality on behavioural intentions was also significant ($t$ = 12.40, $p$ < .001). When the variable, perceived value was added to the model the two independent variables significantly affected behavioural intentions; perceived service quality ($t$ = 5.28, $p$ < .001) and perceived value ($t$ = 12.18, $p$ < .001). These results also indicate partial mediation as the influence of perceived quality on behavioural intentions became smaller in the third regression equation than in the second (Baron and Kenny 1986).

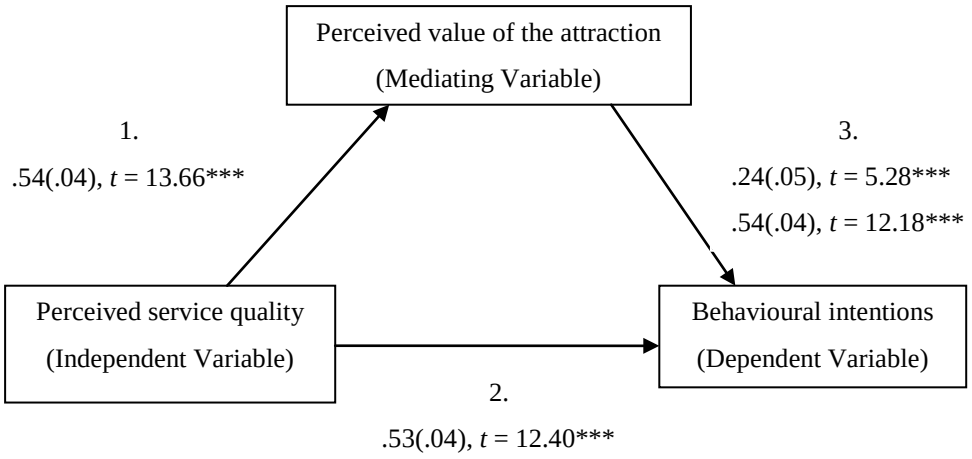


Figure 4.3 Perceived Value Mediation Model 2 after Baron and Kenny (1986)

Further examination of the moderating effect of perceived value was conducted employing Sobel test. Again, a test statistic with a normal distribution was obtained by means of the unstandardized coefficients and the standard errors from the two regressions (Sobel test). The statistical significance of the test statistic was then assessed and it indicated that perceived value undoubtedly positively mediates the effect of perceived quality on behavioural intentions ($p < .001$) albeit partially and thus Hypothesis 6 (*H6*) was supported.

Table 4.25 Value Mediation Analysis

| **Predictor** | **B** | **SE B** | ***t*** |
|---|---|---|---|
| Predicting perceived value | | | |
| Perceived service quality | .54 | .04 | 13.66*** |
| Predicting behavioural intentions | | | |
| Perceived service quality | .53 | .04 | 12.40*** |
| Predicting behavioural intentions | | | |
| Perceived service quality | .24 | .05 | 5.28*** |
| Perceived value | .54 | .04 | 12.18*** |
| Sobel test | 9.55*** | | |

***$p< .001$

### 4.7.8 Predicting the influence of the perceived value of the attraction on behavioural intentions

In testing Hypothesis 7 (*H7*) a number of regression analyses were run. The first regression model was run with Index of Overall Value as the independent variable with Index of Behavioural Intentions as the dependent variable. Table 4.26 shows the results of the analysis. Forty percent of value explained the variance in behavioural intentions. The β coefficients show that Overall Value ($\beta = .65$, $p<.001$) exerts high influence on Index of Behavioural Intentions and it is statistically significant at the 95% confidence level. For the significant

regression coefficient (β), for every unit increase in value, behavioural intentions increase by .650 units. Thus visitors who perceived overall value in the attraction offering are more likely to exhibit positive post visit behavioural intent.

Table 4.26 Regression of Behavioural Intentions Index on Overall Value Index

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .650 | .423 | .421 | 1 | 329.234 | .000 | 1.996 |

Regression coefficients

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Index of overall value | .675 | .037 | .650 | 18.145 | .000 | 1.000 | 1.000 |

Another series of regression models were run with Index of Overall Value and behavioural intentions measures as individual dependent variables. When the model of Index of Overall Value and Behavioural Intention 1 (BI1 - I would speak highly of the attraction to friends and relatives) was examined, Overall Value was found to explain 32% of the variance in BI1 (Table 4.27). When Behavioural Intention 2 (BI2 - I would recommend the attraction to others) was considered in a separate model, Overall Value explained 38% of the variance in BI2 (Table 4.28). In turn when Behavioural Intention 3 (BI3 - I would visit the attraction again) was regressed on the Index of Overall Value, Overall Value explained 25% of the variability in the model (see Table 4.29).

For the significant coefficients (β), for every unit increase in Overall Value, the tendency for visitors to speak highly of the attraction to friends and relatives will increase by .565 units; for a unit increase in Overall Value, recommending the attraction to others increased by .618 units and also, a unit increase in

Overall Value results in a .502 unit increase in re-visitation (see Tables 4.27, 4.28 and 4.29). Thus, visitors who perceived overall value in the delivery of either/both Alton Towers or Blists Hill Victorian Town are more likely to recommend and speak highly of the attraction than revisit. These findings are consistent with the literature since in a tourism context, as identified by Hutchinson *et al* (2009); Liang *et al* (2008) and Kozak and Remington (2000), it is easier for visitors to recommend than revisit. Lee *et al* (2007) in a DMZ context found overall value to have a positive and direct relationship with recommendations to others. Bansal and Voyer (2000) conclude that service customers unlike tangible goods customers rely heavily on word of mouth to make decision for future purchases hence this poses serious implication for the attraction industry managers.

Largely, Overall Value perception is very crucial in the determination of Behavioural Intention 2 (BI2 - I would recommend the attraction to others) and Behavioural Intention 1 (BI1 - I would speak highly of the attraction to friends and relatives). This is in line with Cronin *et al* (2000) submission regarding value perception and recommendation. Nevertheless, value influenced significantly all the three behavioural intentions variables in the model. This indicates that overall perception of value plays an important and separate part in forming behaviours in visitor attraction product post purchase scenario.

Overall, Hypothesis 7 (*H7*) was supported as all the regression model examined to assess the influence of the perceived value of the attraction on behavioural intentions reflect the general state of the literature (e.g. Cronin *et*

*al.*, 2000; Lee *et al.*, 2007 and Chen and Chen, 2009). However, these findings are at variance with Gallarza and Saura's (2006) study results that did not find direct effect of social, play, aesthetics, and time and effort value dimensions on loyalty.

Table 4.27 Regression of Behavioural Intention 1 (I would speak highly of the attraction to friends and relatives) on the Index of Overall Value

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .565 | .319 | .317 | 1 | 211.666 | .000 | 1.891 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Index of overall value | .670 | .046 | .565 | 14.549 | .000 | 1.000 | 1.000 |

Table 4.28 Regression of Behavioural Intention 2 (I would recommend the attraction to others) on the Index of Overall Value

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .618 | .381 | .380 | 1 | 276.311 | .000 | 2.020 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Index of overall value | .652 | .039 | .618 | 16.623 | .000 | 1.000 | 1.000 |

In addition, Value variables were run as predictor variables, first against Overall Behavioural Intentions, then against individual behavioural intention measures as dependent variables. When the Index of Overall Behavioural Intentions was regressed against the Value variables the result of the analysis support the relationship that value influences behavioural intentions with 44% of the value explaining the variance in visitor overall behavioural intention. Table 4.30 displays the unstandardized regression coefficients (B) and standard errors, and the standardized coefficients (β). The visit was value for money

(VAL1), the visit made me happy (VAL3) and it made me feel adventurous (VAL7) were found to be significant predictors. For the significant regression coefficients (β), for every unit increase in VAL1, the Index of Overall Behavioural Intentions increased by .286 units; for every unit increase in VAL3, the dependent variable increased by .264, and the dependent variable increased by .123 units for every increase in VAL7. Consequently, visitors who are likely to engage in positive post visit behaviour would have to see their visit as value for money, would consider admission as being reasonably priced and also derive a sense of adventure.

Table 4.29 Regression of Behavioural Intention 3 (I would visit the attraction again) on the Index of Overall Value

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .502 | .252 | .250 | 1 | 149.727 | .000 | 2.058 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Index of overall value | .645 | .053 | .502 | 12.236 | .000 | 1.000 | 1.000 |

For the regression of the three behavioural intentions measures, Tables 4.31, 4.32 and 4.33 show very interesting results. VAL1 and VAL3 were consistently significant in all the three regressions and explain the variability in the three behavioural intentions measures confirming the results from the preceding regression. The regression of the value variables with Behavioural Intention 3 (I would visit the attraction again) produced two more significant variables - VAL4 (I was excited with the visit) (β = .158, $p$<.05) and VAL7 (It made me feel adventurous) (β = .185, $p$<.05).

Table 4.30 Regression of the Index of Overall Behavioural Intentions on Value variables

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .676 | .457 | .444 | 8 | 33.896 | .000 | 2.109 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardiz-ed coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| VAL1 The visit was value for money | .193 | .047 | .286 | 4.147 | .000 | .356 | 2.812 |
| VAL2 Admission was reasonably priced | -.015 | .043 | -.024 | -.357 | .721 | .378 | 2.648 |
| VAL3 The visit made me happy | .281 | .065 | .264 | 4.336 | .000 | .454 | 2.204 |
| VAL4 I was excited with the visit | .103 | .057 | .112 | 1.817 | .070 | .447 | 2.239 |
| VAL5 The visit improved the way I am perceived by my peers | .011 | .052 | .016 | .209 | .835 | .306 | 3.266 |
| VAL6 The visit gave me social approval from others | .021 | .052 | .031 | .406 | .685 | .290 | 3.449 |
| VAL7 It made me feel adventurous | .088 | .045 | .123 | 1.981 | .048 | .439 | 2.280 |
| VAL8 The visit satisfied my curiosity | .067 | .049 | .082 | 1.359 | .175 | .461 | 2.167 |

These results indicate that visitors' perception of value for money and feeling of happiness for visiting the case attractions have significant effect not only on Overall Behavioural Intentions but also on recommendation, positive word of mouth and revisit intentions. Operators of Alton Towers and Blists Hill

Victorian Town attractions are likely to optimise repeat visitation as well as enjoy free, positive word of mouth advertisement from their customers who have experienced visits worth the value of money paid and which had evoked a feeling of happiness.

Table 4.31 Regression of Behavioural Intention 1(I would speak highly of the attraction to friends and relatives) on Value variables

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .664 | .441 | .427 | 8 | 31.790 | .000 | 1.942 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| VAL1 The visit was value for money | .196 | .051 | .266 | 3.814 | .000 | .356 | 2.812 |
| VAL2 Admission was reasonably priced | .014 | .047 | .021 | .304 | .761 | .378 | 2.648 |
| VAL3 The visit made me happy | .268 | .072 | .232 | 3.747 | .000 | .454 | 2.204 |
| VAL4 I was excited with the visit | .105 | .062 | .105 | 1.683 | .093 | .447 | 2.239 |
| VAL5 The visit improved the way I am perceived by my peers | -.006 | .058 | -.008 | -.100 | .920 | .306 | 3.266 |
| VAL6 The visit gave me social approval from others | .095 | .057 | .128 | 1.659 | .098 | .290 | 3.449 |
| VAL7 It made me feel adventurous | .024 | .049 | .030 | .480 | .632 | .439 | 2.280 |
| VAL8 The visit satisfied my curiosity | .099 | .054 | .111 | 1.817 | .070 | .461 | 2.167 |

Table 4.32 Regression of Behavioural Intention 2 (I would recommend the attraction to others) on Value variables

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .675 | .455 | .442 | 8 | 33.566 | .000 | 2.061 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardiz-ed coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| VAL1 The visit was value for money | .203 | .048 | .293 | 4.240 | .000 | .356 | 2.812 |
| VAL2 Admission was reasonably priced | -.022 | .044 | -.034 | -.502 | .616 | .377 | 2.649 |
| VAL3The visit made me happy | .396 | .066 | .364 | 5.954 | .000 | .454 | 2.204 |
| VAL4 I was excited with the visit | .030 | .058 | .032 | .520 | .604 | .447 | 2.239 |
| VAL5 The visit improved the way I am perceived by my peers | .046 | .054 | .064 | .856 | .393 | .306 | 3.265 |
| VAL6 The visit gave me social approval from others | -.032 | .053 | -.046 | -.597 | .551 | .290 | 3.448 |
| VAL7 It made me feel adventurous | .081 | .046 | .110 | 1.763 | .079 | .439 | 2.276 |
| VAL8 The visit satisfied my curiosity | .064 | .051 | .076 | 1.257 | .210 | .462 | 2.165 |

Table 4.33 Regression of Behavioural Intention 3 (I would visit the attraction again) on Value variables

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .531 | .281 | .264 | 8 | 15.720 | .000 | 2.248 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| VAL1 The visit was value for money | .181 | .064 | .223 | 2.804 | .005 | .355 | 2.820 |
| VAL2 Admission was reasonably priced | -.036 | .059 | -.047 | -.614 | .540 | .377 | 2.654 |
| VAL3 The visit made me happy | .177 | .089 | .139 | 1.975 | .049 | .453 | 2.206 |
| VAL4 I was excited with the visit | .174 | .078 | .158 | 2.226 | .027 | .446 | 2.241 |
| VAL5 The visit improved the way I am perceived by my peers | -.008 | .072 | -.009 | -.106 | .915 | .306 | 3.265 |
| VAL6 The visit gave me social approval from others | .001 | .071 | .001 | .009 | .993 | .290 | 3.448 |
| VAL7 It made me feel adventurous | .160 | .062 | .185 | 2.597 | .010 | .439 | 2.278 |
| VAL8The visit satisfied my curiosity | .035 | .068 | .036 | .513 | .608 | .460 | 2.172 |

Finally, four more regression analyses were run with Value Factors as predictors and both the Index of Overall Behavioural Intentions (Table 4.34) and individual behavioural intentions measures (Tables 4.35-4.37) as dependent variables. The results of the regression of Index of Overall

Behavioural Intentions on the three value factors revealed that the latter explain 42% of the variability. The results of the β coefficient further indicate that social and personal value, monetary value and emotional value are all statistically significant at the 95% confident level with emotional value exerting the most influence (β – .495, $p$<.001).

Another series of regression models were run with Value Factors and individual behavioural intentions measures as dependent variables. When the Value Factors and Behavioural Intention 1 (BI1 - I would speak highly of the attraction to friends and relatives) was examined, the Factors were found to explain 41% of the variance in BI1 (Table 4.35). When Behavioural Intention 2 (BI2 - I would recommend the attraction to others) was considered in a separate model, the Factors explained 40% of the variance in BI2 (Table 4.36). In turn, when Behavioural Intention 3 (BI3 - I would visit the attraction again) was regressed on the Index of Overall Value, the latter explained 25% variability in the model (see Table 4.37).

For the significant coefficients (β) in the Value Factor- Behavioural Intention 1 model, for every unit increase in Emotional value, the tendency for visitors to speak highly of the attraction to friends and relatives increased by .384 units; for a unit increase in Monetary value, Behavioural Intention 1 increased by .205 units and also; a unit increase in Social and Personal resulted in a .175 unit increase in visitors speaking favourably of the attraction to others. For the Value Factor- Behavioural Intention 2 equation, an increase in Emotional value results in .473 units increase in visitors' willingness to recommend the

attraction to others and a unit increase in Monetary value produced a .182 unit increase in Behavioural Intention 2. Social and Personal value was not statistically significant in this model. For the Value Factor- Behavioural Intention 3 model only Emotional value (β – .394, $p$<.001) was found to have a significant effect on revisit intentions.

In conclusion, Hypothesis 7 (*H7*): value positively influences behavioural intentions is supported because visitors to Alton Towers and Blists Hill attractions are likely to recommend and encourage others to visit the attractions and possibly revisit the attraction themselves when the value of the products increase. This result also supports the findings from previous research (Kozak and Remington, 2000; Cronin *et al.*, 2000; Lee *et al.*, 2007; Duman and Mattila, 2005; Liang *et al.*, 2008; Hutchinson *et al.*, 2009 and Chen and Chen, 2009) in the literature.

Table 4.34 Regression of Index of Overall Behavioural Intentions on Value Factors

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .651 | .424 | .419 | 3 | 80.187 | .000 | 2.050 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Social and Personal value | .097 | .039 | .132 | 2.479 | .014 | .618 | 1.617 |
| Monetary value | .119 | .036 | .166 | 3.326 | .001 | .709 | 1.411 |
| Emotional value | .350 | .042 | .459 | 8.325 | .000 | .580 | 1.724 |

Table 4.35 Regression of Behavioural Intention 1 on Value Factors

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .642 | .412 | .406 | 3 | 76.245 | .000 | 1.893 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Social and Personal value | .140 | .043 | .175 | 3.239 | .001 | .618 | 1.617 |
| Monetary value | .160 | .039 | .205 | 4.070 | .000 | .709 | 1.411 |
| Emotional value | .319 | .046 | .384 | 6.901 | .000 | .580 | 1.724 |

Table 4.36 Regression of Behavioural Intention 2 on Value Factors

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .636 | .404 | .398 | 3 | 73.633 | .000 | 2.021 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Social and Personal value | .057 | .041 | .075 | 1.382 | .168 | .618 | 1.617 |
| Monetary value | .134 | .037 | .182 | 3.587 | .000 | .708 | 1.413 |
| Emotional value | .369 | .044 | .473 | 8.422 | .000 | .580 | 1.723 |

Table 4.37 Regression of Behavioural Intention 3 on Value Factors

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .509 | .259 | .252 | 3 | 37.977 | .000 | 2.180 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Social and Personal value | .094 | .053 | .106 | 1.755 | .080 | .619 | 1.616 |
| Monetary value | .065 | .049 | .076 | 1.337 | .182 | .709 | 1.410 |
| Emotional value | .360 | .057 | .394 | 6.295 | .000 | .581 | 1.722 |

### 4.7.9 Predicting the influence of the perceived service quality of the attraction on behavioural intentions

In order to verify the hypothetical relations between service quality of the attraction and behavioural intentions, four regression models were run, Tables 4.38-4.41 display the results.

The first regression model was run with Overall Quality as the predictor variable for the Index of Overall Behavioural Intentions. Table 4.38 displays the results of the first regression showing that Overall Quality explains 26% of the variance in Overall Behavioural Intentions. The result of the β coefficient indicates that for a unit increased in Overall Quality, Overall Behavioural Intentions increased by .506 units.

The results of the impact of Overall Quality on possibility of the attraction visitors speaking highly of the attraction to friends and relatives (BI1), recommending the attraction to others (BI2) and visiting the attraction again (BI3) are displayed in Tables 4.39, 4.40 and 4.41. In the first regression, the independent variable explained 27% variance in BI1. The second regression shows the independent variable explaining 22% variance in BI2 and the third indicates Overall Quality explaining 14% of the variability in BI3. In all cases the independent variable was significant at 95% confidence level. In addition, the regression coefficients indicated that Overall Quality had significant impact on Behavioural Intents exerting highest influence on BI1 (β – .524, $p$<.001), followed by BI2 (β – .475, $p$<.001) and BI3 (β – .383, $p$<.001).

The results presented in the preceding two paragraphs indicated service quality exert direct influence on Overall Behavioural Intentions (26% of the variance explained) and the individual measured adopted in this study to operationalize the construct (between 27-14% of the variance explained). Although the results are somewhat lower compared to for example perceive value results; however, the results support Hypothesis 8 (*H8*). The general state of the literature regarding the direct the relationship of service quality and behavioural intentions is quite mixed. For example Cronin *et al* (2000) found significant direct link between perceived quality and behavioural intentions in fast food, entertainment, spectator sports, participative sports, health care and long haulage ground transport; it was however noted that when data from individual sectors were tested separately only four of the sectors displayed a direct link between perceived quality and behavioural intentions. Gonzales *et al* (2007) found buying intentions and word of mouth communication are positively influenced by perceived quality although they found that satisfaction exerts more influence. Whilst it is acknowledge that direct relationship of service quality and behavioural intentions may not exist in all service contexts, this relationship was found in Alton Towers and Blists Hill Victorian Town visitor attraction context.

Table 4.38 Regression of the Index of Overall Behavioural Intentions on Overall Quality

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .506 | .256 | .255 | 1 | 153.675 | .000 | 2.022 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Overall quality | .534 | .043 | .506 | 12.397 | .000 | 1.000 | 1.000 |

Table 4.39 Regression of BI 1 on Overall Quality

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .524 | .274 | .273 | 1 | 168.641 | .000 | 2.023 |

Regression coefficients

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Overall quality | .594 | .046 | .524 | 12.986 | .000 | 1.000 | 1.000 |

Table 4.40 Regression of BI 2 on Overall Quality

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .475 | .226 | .224 | 1 | 129.530 | .000 | 2.007 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Overall quality | .511 | .045 | .475 | 11.381 | .000 | 1.000 | 1.000 |

Table 4.41 Regression of BI 3 on Overall Quality

| R | $R^2$ | Adjusted $R^2$ | df | F | sig | Durbin-Watson |
|---|---|---|---|---|---|---|
| .383 | .147 | .145 | 1 | 75.868 | .000 | 2.092 |

Regression coefficients

| Model | Unstandardized coefficient | | Standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Overall quality | .506 | .058 | .383 | 8.710 | .000 | 1.000 | 1.000 |

#### 4.7.10.1 Predicting the influence of perceived service quality on behavioural intentions through the mediating effect of visitor satisfaction

Hypothesis 9a (*H9a*) stated that the effect of service quality on behavioural intentions would be mediated by visitor satisfaction. To test this hypothesis, Baron and Kenny's (1986) procedure and the Sobel (1982) statistic were used. The results are given in Figure 4.4 and Table 4.42. The regression analysis indicated that the effect of service quality on visitor satisfaction was significant ($t$ = 8.60, $p$<.001). Likewise, the effect of service quality on behavioural intention was significant ($t$ = 12.40, $p$<.001). Further to this satisfaction

significantly influenced behavioural intentions ($t$ = 19.22, $p$<.001) as did service quality ($t$ = 3.59, $p$<.001) in this same equation. However, the impact of service quality was less in the third equation than the second thereby signifying a partial mediation (Baron and Kenny, 1986).

The indirect influence of the service quality of the attraction on behavioural intentions through satisfaction was tested using the Sobel (1982) test. As shown in Table 4.42, the mediation effect of satisfaction between service quality and behavioural intentions was significant (p<001). The procedure and test indicated a partial mediation effect therefore, Hypothesis 9a (*H9a*) was supported. This finding is consistent with results of other studies in tourism (eg Zabkar *et al.*, 2010; Baker and Crompton, 2000). Cole and Illum (2006), in a festival context, also found the mediating role of visitor satisfaction confirmed in the relationship between service quality/performance quality and behavioural intentions.

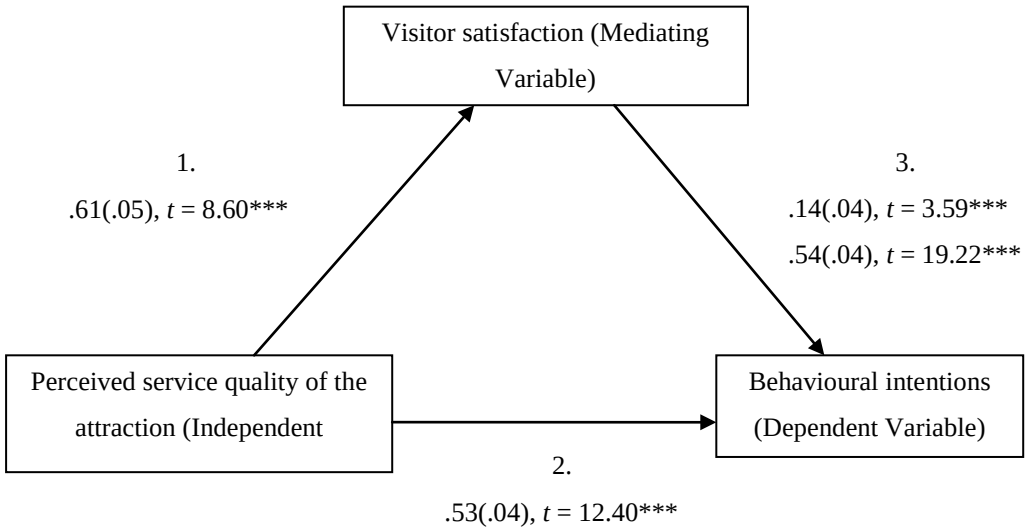


Figure 4.4 Visitor Satisfaction Mediation Model 1 after Baron and Kenny (1986)

Table 4.42 Satisfaction Mediation Analysis

| **Predictor** | **B** | **SE B** | ***t*** |
|---|---|---|---|
| Predicting Visitor satisfaction | | | |
| Perceived service quality | .61 | .05 | 8.60*** |
| Predicting behavioural intentions | | | |
| Perceived service quality | .53 | .04 | 12.40*** |
| Predicting behavioural intentions | | | |
| Perceived service quality | .14 | .04 | 3.59*** |
| Visitor satisfaction | .65 | .03 | 19.22*** |
| Sobel test | 10.63*** | | |

***$p$< .001

#### 4.7.10.2 Predicting the influence of value on behavioural intentions through the mediating effect of visitor satisfaction

Having tested for the influence of perceived service quality on behavioural intentions and the mediating effect of satisfaction, Baron and Kenny's (1986) procedure and the Sobel (1982) statistic were also adopted to test Hypothesis 9b (*H9b*) i.e. for the influence of perceived value. The results of the tests are shown in Figure 4.5 and Table 4.43. The analysis showed that the effect of perceived value on visitor satisfaction was significant ($t$ = 15.86, $p$<.001). Equally, the influence of perceived value on behavioural intentions was significant ($t$ = 18.15, $p$<.001). Furthermore, both satisfaction ($t$ = 16.70, $p$<.001) and perceived value ($t$ = 8.55, $p$<.001) had significant influenced on behavioural intentions when both variables were present in the same equation. Nevertheless, the effect of perceived value was less in the third equation than in the second one thereby indicating a partial mediation of satisfaction in the model (Baron and Kenny, 1986).

Similar to the test of *H9a*, the indirect impact of the perceived value of the attraction on behavioural intentions through satisfaction was verified employing the Sobel (1982) test. Table 4.43 shows the mediation effect of satisfaction between perceived value and behavioural intentions was significant ($p<.001$). The procedure and test indicated a partial mediation effect therefore, Hypothesis 9b (*H9b*) was supported. However this is dissimilar to Patterson and Spreng's (1997) work that found the effect of value on behavioural intentions was completely mediated by satisfaction. Chen and Tsai (2007) also reported that visitor satisfaction has a mediating role between perceived value and behavioural intentions; however the intensity of mediation was not reported. Essentially, the result this analysis supports Tam's (2004) work that reported perceived value as having an indirect effect on behavioural intentions through customer satisfaction.

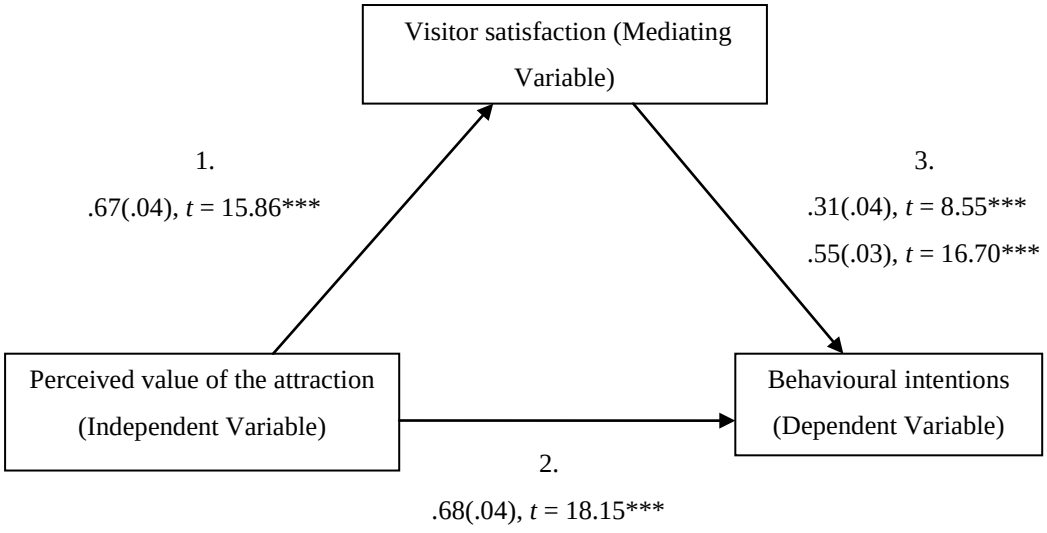


Figure 4.5 Visitor Satisfaction Mediation Model 2 after Baron and Kenny (1986)

Table 4.43 Satisfaction Mediation Analysis

| **Predictor** | **B** | **SE B** | ***t*** |
|---|---|---|---|
| Predicting visitor satisfaction | | | |
| Perceived value | .67 | .04 | 15.86*** |
| Predicting behavioural intentions | | | |
| Perceived value | .68 | .04 | 18.15*** |
| Predicting behavioural intentions | | | |
| Perceived value | .31 | .04 | 8.55*** |
| Visitor satisfaction | .55 | .03 | 16.70*** |
| Sobel test | 12.37*** | | |

***$p$< .001

Table 4.44 summarises the results of the hypothesis testing. It is useful to note that all mediation tests yielded partial mediations and the path perceived quality→ perceived value→ visitor satisfaction → behavioural intentions was confirmed.

Table 4.44 Summary of Results from Hypothesis Tests

| | Hypothesis | Justification of Result | Test result |
|---|---|---|---|
| *H1* | Attraction attributes ↓ Perceived quality of the attraction | The results of the regression analysis indicate that attraction attributes (through the Factors) had a positive impact on Overall Quality. An adjusted $R^2$ of 0.38 indicates that 38% of Overall Quality was explained by the six attraction factors. The findings were consistent with the literature that visitor perception of attribute performance influences perception of service quality (Zabkar *et al*., 2010; Cole *et al*., 2002). | Supported |
| *H2* | Attraction attributes ↓ Perceived value of the attraction | Forty four per cent of value was explained by the attraction attributes via the six factors. This result support Lin's (2003) study of product quality that found a significant relationship between product attributes and customer perceived value. This result when compared to the figure of perceived quality shows that attraction attributes have more influence on perceived value. | Supported |
| *H3* | Perceived value of the attraction ↓ Visitor satisfaction | Overall Value explains 36% of the variability in Overall Satisfaction ($\beta$ = .60, $p$<.001), which indicates that Overall Value has a meaningful influence on visitors' satisfaction. The findings reflect the general agreement in the literature; e.g. Lee *et al's* (2007) and Cronin *et al's* (2001) studies that visitors' perceived value is a significant | Supported |

| | | | |
|---|---|---|---|
| | | predictor of satisfaction. | |
| *H4* | Perceived quality of the attraction ↓ Visitor satisfaction | The result of the regression analysis of Overall Satisfaction on Overall Quality supports the view that quality influenced satisfaction with 28% of Overall Quality explaining Overall Satisfaction (β = 0.53, *p*<.001). | Supported |
| *H5* | Attraction attributes ↓ Perceived value ↓ Visitor satisfaction | Using Baron and Kenny's (1986) procedure and the Sobel (1982) test, the mediation effect of Perceived Value on attraction attribute performance and Overall visitor satisfaction was significant (*p*< .001). The tests showed that perceived value partially mediated the effect of attraction attribute performance on overall visitor satisfaction. | Supported |
| *H6* | Perceived service quality ↓ Perceived value ↓ Behavioural intentions | Similarly, utilising Baron and Kenny's (1986) procedure and the Sobel (1982) test, the tests revealed significant results (*p*< .001), indicating that Perceived Value partially mediated the effect of Perceived Service Quality on Behavioural Intentions. | Supported |
| *H7* | Perceived value of the attraction ↓ Behavioural intentions | Forty per cent of Value explained Behavioural Intentions. Overall Value (β = .65, p<.001) exerts high influence on Index of Behavioural Intentions and it is statistically significant at the 95% confidence level. The β value indicates that for every unit increase in Value, Behavioural Intentions increased by .650 units. Thus visitors who perceived value in the attraction offering are more likely to exhibit positive behavioural intent. | Supported |
| *H8* | Perceived quality of the attraction ↓ Behavioural intentions | Overall Quality explains 26% of the variance in Overall Behavioural Intentions. The result of the β coefficient indicates that for a unit increase in Overall Quality, Overall Behavioural Intentions increased by .506 units. | Supported |
| *H9a* | Perceived quality of the attraction ↓ Visitor satisfaction ↓ Behavioural intentions | Utilising Baron and Kenny's (1986) procedure and the Sobel (1982) test, the procedure and test indicated a partial mediation effect of visitor satisfaction between service quality and Behavioural Intentions significant at *p*<001. | Supported |
| *H9b* | Perceived value of the attraction ↓ Visitor satisfaction ↓ Behavioural intentions | Baron and Kenny's (1986) procedure and the Sobel (1982) test indicate a partial mediation effect of visitor satisfaction between Perceived Value and Behavioural Intentions significant at *p*<001. | Supported |

## 4.8 Comparison of perceived quality, value, satisfaction and behavioural intentions between Alton Towers and Blists Hill Victorian Town

A *t*-test was used to test for significant differences across the two attractions in terms of perceived quality, perceived value, overall satisfaction and visitors' post purchase behavioural intentions. Tables 4.44 and 4.45 reveal the group statistics and the *t*-test results, respectively. A general trend revealed in the results was that there was a significant difference in the perception of quality and the feeling of satisfaction between the Blists Hill and Alton Towers visitors. An examination of the *t*-test results indicates substantive effects. On average, Blists Hill Victorian Town respondents (M = 4.27, SE = 0.05) perceived higher quality in the offering of the attraction than did Alton Towers respondents (M = 3.38, SE = 0.07); the difference was significant $t(444) = -2.99$, $p<.01$ with a small size effect ($r = 0.14$). This particular difference can be attributed to the fact that quality is context specific (Olorunniwo and Hsu, 2006; Dabholkar *et al.,* 1996) and a function of both attraction management and the performance of site attributes (Cole *et al.,* 2002). Explicably, visitors to the Blists Hill site perceived the site's features to have performed better than did the respondents to the Alton Towers site. Although the result did not indicate that the Alton Towers product had no quality, it had a particular managerial implication for the Alton Towers. Managers in Alton Towers may need to verify whether visitors perceive the offerings of other attractions, particularly theme parks, have better quality than Alton Towers'. There was, however, no statistically significant difference in the perception of overall value in the two attractions. For the overall satisfaction, the result of the *t*-test analysis once again revealed a statistically significant difference between the two attractions. The Blists Hill Victorian Town

respondents (M = 4.29, SE = 0.05) were more satisfied than their Alton Towers counterparts (M = 4.15, SE = 0.05); the difference was significant $t(448) = -1.98$, $p<.05$, but had a negligible effect size ($r = 0.09$). Further, there was no statistically significant difference in visitor behavioural intentions between the two groups in terms of repeat visitation, speaking highly of the visited attractions and recommending the attractions to others.

Table 4.45 Group Statistics

| | Attractions | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Overall Quality | Alton Towers | 241 | 4.0871 | .65565 | .04223 |
| | Blists Hill Victorian Town | 215 | 4.2744 | .67950 | .04634 |
| Index of Overall Value | Alton Towers | 242 | 3.7701 | .63670 | .04093 |
| | Blists Hill Victorian Town | 219 | 3.8550 | .72975 | .04931 |
| Overall Satisfaction | Alton Towers | 241 | 4.1452 | .79035 | .05091 |
| | Blists Hill Victorian Town | 209 | 4.2871 | .72316 | .05002 |
| Index of Overall Behavioural Intentions | Alton Towers | 239 | 4.3006 | .68529 | .04433 |
| | Blists Hill Victorian Town | 217 | 4.3111 | .74251 | .05041 |

Table 4.46 *t*-test Results for Comparison of the Service Constructs

| **Attraction attributes** | **Attractions[1]** |
|---|---|
| Overall Quality | -2.987** |
| Index of Overall Value | _ |
| Overall Satisfaction | -1.975* |
| Index of Overall Behavioural Intentions | _ |

Note: Figures represent the outcomes from independent samples *t*-test. [1]Alton Towers/Blists Hill Victorian Town. *Significant at $p < .05$ level; ** Significant at $p < .01$ level.

These were very interesting findings in view of theoretical establishment of the relationships between perceived service quality, perceived value, visitor satisfaction and behavioural intentions. However, it is difficult to understand why there is no significant difference in perceived value and the way the visitors intend to behave after their visits to the two attractions. The literature

converges on the notion of high quality producing high perception of value (Gallarza and Saura, 2006); so it would have been expected that the difference in quality would translate to difference in the perception of value. In this case, it can be assumed that Blists Hill Victorian Town are underutilising installed quality capacity. Sandoval-Chavez and Beruvides (1998) classify underutilization of installed quality capacity as a component of opportunity losses, which is likely to lead to excessive service production time, high cost of quality and invariably the passing of the cost to visitors in terms of exorbitant price tag.

Finally, the results further confirm those found in previous research (e.g. Oh, 2000a; Tam, 2004), that perceived value has a greater influence on behavioural intentions than quality and satisfaction. It can be inferred that if visitors perceived value in an offering, so far the level of quality is acceptable they are likely to resort to positive behavioural intentions.

### 4.9 Summary

This chapter presents the findings and discussion of the results as obtained from the research plan discussed in chapter three therefore, the chapter investigated the objectives of the study and presented the tests of the research hypotheses. A preliminary exploration of the data indicated the utilisation and adoption of principal component analysis (PCA), parametric test and regression analysis were feasible. The PCA of the attraction attributes yielded six dimensions. The results supported the existing literature in that attraction quality is a multi-dimensional concept. The PCA of perceived value in turn

yielded three factors; this also supports the services management literature that perceived value is equally a multi-dimensional concept. All the nine hypotheses tested were supported and the examination of the effect of sociodemographic characteristics on perception of quality revealed that age, gender and occupation influenced perceived quality and the impacts vary between the two case attractions. A tabulated summary of the study major findings relating to the objectives are displayed in Table 4.47.

Table 4.47 Summary of Main Findings Regarding Objective

| Objectives | Findings |
|---|---|
| Determine the factors that contribute to visitors' perception of quality | Perception of attraction quality is based on six underlying factors namely: Activities, Staff attributes, Operation and environment, Retail, Access and Ease of use. |
| Determine the factors that most influence visitors' perception of these constructs | The factors that influenced the perception of quality most were Activities and Retail. Perception of value was mostly influenced by Activities, Staff attributes and Retail. |
| To examine the effect of sociodemographic characteristics on perception of quality | Age, gender and occupation affected perception of quality and the effects differ between the two attractions. |
| Explain the relationship between perceived quality, value, customer satisfaction and behavioural intentions at visitor attractions level | The pattern of relationship amongst the constructs follows the quality-value-satisfaction-behavioural intentions order. In addition to direct influence, indirect influence also existed with satisfaction partially mediating the relationship between value and between behavioural intentions and quality and behavioural intentions. Value also mediated the relationship between attraction attributes and satisfaction and between quality and behavioural intentions. |
| Compare the differences in perceived quality, value, customer satisfaction and behavioural intensions between the two types of attractions – heritage attractions with enactment and theme parks using Blists Hill Victorian Town and Alton Towers as case studies. | The results showed that there were significant differences in the perception of overall quality and overall satisfaction between the two attractions. However, there was no statistically significant difference in the perception of value and visitors' behavioural intentions. |

# Chapter Five

## Conclusions, Implications and Recommendations

This chapter presents the conclusions based on the discussion in the preceding chapters. It also reports the theoretical and managerial contributions of this study as well as its limitations and then presents the recommendation for future research.

### 5.1 Conclusions

The main focus of this research was to explore issues in service quality within the UK visitor attractions industry with particular reference to Alton Towers and Blists Hill Victorian Town. Primarily, the aim was to gain an understanding of how attraction visitors evaluate quality and explain the relationship between perceived quality, perceived value, visitor satisfaction and behavioural intentions. In the first instance, quality was conceptualised as a formative construct, in terms of its constituent attributes and the role they play in the formation of quality perception (see Rositter, 2002; Zabkar *et al.*, 2010). The research then determined the factors that contribute to visitor perceptions of quality and value. Furthermore, the effects of socio-demographic differences on perception of quality were investigated. A conceptual framework was devised to test the relationships that exist between these variables. Nine hypotheses, formulated on the basis of the literature review, were tested, and the significant differences in perceived service quality, perceived value, visitor satisfaction and behavioural intensions between the aforementioned two attractions were also examined.

The first objective of the study was to delineate the constructs of perceived quality, value and visitor satisfaction and establish how they influence behavioural intentions. Having delineated the service constructs, the second research objective was to determine the factors that contribute to visitor perceptions of quality and value. The results of the PCA revealed that Alton Towers and Blists Hill Victorian Town attractions' quality consists of six underlying dimensions namely: Activities, Staff attributes, Operation and environment, Retail, Access and Ease of use. These dimensions support Milman's (2009) argument that both tangible and intangible elements of attraction products are influential in visitor perception formation. Moreover, these elements may reflect product appearance, aesthetic, visiting time constraints, the cultural framework of the story presented by the attraction, technological capabilities and visitors' state of mind before, during and after visiting the attraction.

Further, the findings from the PCA empirically indicate the presence of dominant dimensions in visitors' perception of quality and value, satisfying the third objective of the research. The emergence of Activities and Retail as the dimensions that most influence the perceived quality of Alton Towers and Blists Hill Victorian Town attractions products indicates that managers need to place particular emphasis on the attributes which load on these dimensions in order to enhance the perceived quality. However, the other four dimensions that were not highly rated should not be taken for granted, even though they may not need immediate management attention. The absence or neglect of one attribute/dimension in a formative model is likely to alter the meaning of the

construct. For instance the absence of the 'Ease of use' dimension or one of the attributes that load on it will alter the meaning of quality in the attraction context even though the dimension was not highly rated.

One significant contribution of this study is that attraction attributes (through the six dimensions) exert more influence on perceived value than on perceived quality. The perceived value of the attractions was mostly influenced by Activities, Staff attributes and Retail dimensions, whereas the perceived quality was mostly influenced by Activities and Retail dimensions. This outcome supports the conceptualisation of quality as a dimension of value in previous research (e.g. Sanchez *et al.*, 2006).

The findings also reveal that age, gender and occupation influence the perception of attraction quality and the effects varied between the two attractions, which supports the argument in the literature that perceived service quality differs across service settings and among different categories of people. The results show that people with different demographics place different levels of importance on a range of visitor attraction attributes and also rate their performance differently.

Generally, female visitors in this study rated the performance of the attraction attributes higher than their male counterpart and this certainly has management implications for Alton Towers and Blists Hill Victorian Town. To make a more informed decision on this issue, attraction managers need to investigate the decision making process relating to attraction selection and visitation. If male

visitors influence the decision to visit attractions more than their female counterparts, then managers have the task of improving their attraction performance to appeal more effectively to actual and prospective male visitors. In addition, students are more critical of cleanliness and the opportunity to learn.

Further analysis indicates that visitors of different age groups also place a different emphasis on attraction attribute importance and rate their performance differently. Whilst there is no general pattern, two age groups – 25-34 and 55-64 were distinct. Age group 55-64 are more critical about 'Promptness of services to visitors', 'Treatment of visitors in a warm and friendly way by staff members' and 'Cleanliness of restrooms' than age group 25-34. Regarding social group perception of the attractions' attributes, visitors in social group A were more particular about the environment and nature. All these hold significant marketing and operational implications for the two attractions in this study. Since attraction attributes are perceived differently by visitors of differing demographic characteristics, attraction managers and marketers would need to monitor various segments of the market to ensure that attributes whose performance are considered important by specific categories of visitors are managed in accordance to their requirements.

Concerning the relationships that exist between perceived quality, value, customer satisfaction and behavioural intentions at visitor attractions level, the findings of this study support a number of dominant theoretical propositions. All the hypotheses tested in this regard were supported. Consistent with prior

research in services management (Cronin *et al.*, 2000) and tourism (Petrick, 2004; Sanchez *et al*., 2006 and Chen and Chen, 2009), the cognitive responses (quality and value) precede emotional (satisfaction) and conative (behavioural intentions) responses.

Another significant contribution of this study is the further expansion of knowledge in the quality-value-satisfaction-behavioural sequence in attraction service experience as it examines the direct and indirect relationships in the service construct. According to Gallarza and Saura (2006) it is imperative this area is explored, particularly in visitor attraction studies, where little has been done. The model provides us with an understanding of the interaction between the service constructs examined in this research. It can be used as a standard framework for the continuous monitoring of visitor perception of service delivery and value. Nevertheless, the model should be tested in other attraction contexts to evaluate its general applicability.

This study also supports Cronin *et al's* (2000) argument that the relationship existing between the service constructs is far more complex than that generally reported in the literature. The findings of this study, like those of Cronin *et al*. (2000) and Petrick (2004), show that perceived quality directly affects perceived value, visitor satisfaction and behavioural intentions. Also, it has indirect effects on behavioural intentions through both perceived value and visitor satisfaction.

The complexity of the relationship is not limited to quality; the perceived value of attractions also exhibits similar convolution. It was found that perceived value has a direct influence on both satisfaction and behavioural intentions. These findings are consistent with previous research by Tam (2004), Hutchinson *et al.,* (2009) and Chen and Chen (2009). Perceived value also has an indirect influence on behavioural intentions through visitor satisfaction. This result supports Tam's (2004) work, which also reported perceived value as having an indirect effect on behavioural intentions through customer satisfaction.

On the whole, the assessment of the model revealed that the service constructs are extensively integrated; hence managers in the industry need to study them carefully and avoid abandoning one for the other - for instance, customer satisfaction and service quality are often the focus of attention within a tourism context, whereas, this study and many others (e.g. Cronin *et al*., 2000; Oh, 2000a; Oh, 2000b; Tam, 2004; Sanchez *et al*., 2006; Chen and Tsai, 2007) indicate that other constructs, such as value, are crucial in visitors' repurchase and referral intentions. Another significant contribution of this study is that it reveals the value and quality scales as important instruments for segmenting visitors and positioning attractions. Although this area would need further investigation because it is essential to identify the elements of the service visitors value most, as well as design the required aspects of service to stimulate visitor perception of value in order to position the product effectively in the mind of the target audience.

Regarding the comparison of the two attractions on the basis of perceived quality, value, customer satisfaction and behavioural intentions, the study reveals an interesting, though inconclusive result. There were significant differences in the perception of overall quality and overall satisfaction between the two attractions. The results revealed that the Blists Hill Victorian Town respondents were more satisfied than their Alton Towers counterparts, and perceived higher quality in the offering of the attraction than did Alton Towers' respondents. The difference in quality was expected owing to the consensus in the literature that quality is context specific. Nonetheless, there was no statistically significant difference in the perception of value and visitors' behavioural intentions.

It would be appealing to conclude that visitors to the two attractions perceived value in the same way. However, this is unlikely because of the difference in the type of attraction: value is multi-faceted and complex (Gallarza and Saura, 2006) and has different meanings to different consumers (Zeithaml, 1988). As such, it is difficult to understand why this was the case. The general consensus in the literature is that high perception of quality translates to high perception of value. On this premise it would have been envisaged that the level of perceived value would be higher in Blists Hill Victorian Town than in Alton Towers owing to the fact that visitors to the former perceived the attraction to be of higher quality. Given that there was no significant difference in the perception of value at the two attractions, it can be inferred that Blists Hill Victorian Town is underutilising its installed quality capacity. Underutilization of installed capacity, according to Sandoval-Chavez and Beruvides (1998), is

classified as an element of opportunity losses, which may lead to high cost of quality and consequently, an exorbitant price tag.

### 5.2 Theoretical contributions

The aim of this study was to explore how visitors to attractions perceive quality and to explain the relationship between perceived service quality, perceived value, visitor satisfaction and behavioural intentions. In this regard, quality was conceptualised as a formative construct as opposed to the previous conceptualisation of quality as a formative variable. The consequent dimensions of perceived quality, derived from PCA, denoting the factors that explain quality in an attraction context, present concrete empirical grounds on which quality in the attraction sector can be delineated. This research therefore contributes to theory development by demonstrating how the perceived quality of an attraction can be conceptualised. However, the generalisability of the extracted factors in shaping quality perceptions elsewhere is unknown.

From a theoretical perspective, this study supports the cognitive-affective-conative framework because satisfaction partially mediates the influence of quality and perceived value, on behavioural intentions. Moreover, the findings make several significant contributions to the literature. These include the following:

(1) The study provides an extended discussion of a range of service constructs namely perceived quality, perceived value, visitor satisfaction and behavioural intentions.

(2) It synthesises and delineates the influencing factors that determine the visitor perception of quality in the context of visitor attractions.

(3) The study draws attention to and places emphasis on the multidimensional nature of quality and highlights the differences in visitor perceptions based on settings and visitor socio-demographic characteristics.

(4) It reveals that attraction attributes exert more influence on perceived value than on perceived quality.

(5) The study shows that the value scale can serve as an important instrument for market segmentation and positioning in the attractions context.

(6) The study draws attention to and places emphasis on the multidimensional nature of value and highlights its relationship with other service constructs.

(7) It suggests that the measures employed in the past may be inadequate in capturing value's quality dimension.

(8) It makes suggestions for future research relevant to attraction and services management.

(9) The study presents testable hypotheses regarding the relationship between the services constructs in (1) above.

The set of hypotheses tested in this work were examined using regression analyses. The testing of *H1* produced a result which is consistent with the findings of previous research in that visitor perceptions of attribute

performance influence perceptions of service quality (Zabkar et al., 2010; Cole et al., 2002); therefore, hypothesis 1 (H1) was supported. With respect to the prediction of perceived value through the performance of attraction attributes, the examination of the individual value variables against the attraction factors on one hand and value factors against the attraction factors on the other confirmed that the Activities, Retail and Staff are the three significant dimensions which exert influence on value. The findings from the regression of overall value on the six attraction factors shows that 44% of value was explained by the factors. The result suggests that visitor perception of value is influenced by Activities, Retail and Staff dimensions at both the Alton Towers and Blists Hill Victorian Town visitor attractions. Hypothesis 2 (*H2*) was therefore supported.

The testing of hypothesis 3 (*H3*) - *Visitor satisfaction is determined by the perceived value of the attraction* - was carried out by regressing Overall Satisfaction on the Index of Value. The findings reflect the general agreement in the literature (e.g. Lee *et al.,* 2007; Cronin *et al.,* 2001), that tourists' perceived value is a significant predictor of satisfaction. Thus hypothesis 3 (*H3*) was supported. Hypothesis 4 (*H4*) was also supported by these findings.

Hypotheses 5 (*H5*), 6 (*H6*), and 9 (*H9a and H9b*) tested the mediating influence of the service constructs using Kenny and Baron (1986) procedure and the Sobel (1982) statistic. The results indicated the partial mediation effect of perceived value between attraction attributes and satisfaction and between perceived quality and behavioural intentions on one hand; and of Satisfaction

between perceived quality and behavioural intentions and between perceived value and Behavioural intentions on the other hand. All tests were significant ($p < .001$) hence all three hypotheses were accepted.

Hypotheses 7 (*H7*) and 8 (*H8*) tested the relationships between behavioural intentions and perceived value and service quality, respectively. *H7* was supported because perceived value significantly influenced behavioural intentions in line with the findings from previous research (e.g. Cronin et al., 2000; Lee et al., 2007 and Chen and Chen, 2009). Equally, the test of *H8* showed a statistically significant relationship between service quality and behavioural intentions. The β coefficient indicates that for a unit increase in Overall Quality, Overall Behavioural Intentions increases by .506 units.

### 5.3 Managerial implications

The model developed in this study aimed to provide attraction operators with a comprehensive tool for understanding the key factors contributing to attraction service quality and value from the consumer perspective. Based on the findings of the study, managers need to look at the visitor experience holistically rather than concentrating on one or two service constructs. For instance, a number of organisations concentrate on measuring satisfaction and view upgrading physical facilities as the mainstay of quality, which this research suggests may not be a viable strategy. This study reveals that perceived value plays an important role in visitor satisfaction and intention to return and recommend visited attractions to friends and family. Therefore, managers need to consider how value, and of course the related constructs, affect behavioural intentions.

This study also reveals that attractions' websites do not contain all vital information that visitors consider important to the formation of their perception of quality and value. Marketing managers in both Alton Towers and Blists Hill Victorian Town attraction sites may want to review their promotional materials, particularly websites, and ensure that they are communicating the most effective message to both existing and potential visitors.

One possible area the managers in the two attractions need to consider in order to improve their customers' perception of the attraction is in the provision of activities. The study shows that the variety and quality of activities visitors took part in or saw during their visit was germane to their perception of quality and value. Since this aspect was rated high in both attractions, managers of individual attractions would need to identify specific aspects that are considered important by their target market through in-house research.

Furthermore, because female visitors in this study rated the performance of the attraction attributes higher than their male counterpart, managers need to investigate who determines the decision to visit and choose attractions. Managers may also need to identify attributes that appeal to male visitors and explore ways to enhance their perception of attribute performance.

The commonest means of segmenting the market in services and traditional marketing, and particularly in tourism, is the a priori use of customer socio-demographic characteristics. This study shows that it is feasible to classify

visitors a posteriori according to their quality orientation and value perception. These dimensions can be combined with demographic variables to effectively profile visitor segments in order to market attractions more effectively by highlighting valued aspects to particular types of visitors.

On an individual attraction basis, having outperformed Alton Towers in the areas of customer satisfaction and quality service, the Blists Hill Victorian Town operators need to translate this into optimal positive visitor behaviour in relation to customer loyalty. Alton Towers on the other hand, may need to assess its customer level of satisfaction and perception of the attraction quality and benchmark this against similar attractions' results.

### 5.4 Limitations

This research has contributed to knowledge by extending the understanding of how visitors evaluate quality by developing and testing a model that examined the relationship between perceived quality, value, satisfaction and behavioural intentions in the visitor attraction context. Whilst care was taken in the design and conduct of the study, as with any other behavioural research project, some limitations were identified.

Due to the nature of visitor attraction operations, which make access to the visitor difficult, a multiple method of data collection was adopted including a web-based survey. Web-based surveys are often criticised for not having high enough response rates to enable the results to be generalized beyond the scope of the sample (Sill and Song, 2002). This may result from technological

problems with delivery, for instance the incompatibility of the survey system with web browser or computer system used by respondent, security issues. Problems with spam mails are also likely to cause problems with delivery in some instances. In a case like this, intended respondents may not be reached, contributing to low response rates and an impact on representativeness. Also associated with the constraint of adopting multiple methods of data collection was the implementation of a non-random sampling method. Future research in this topic area could employ a probability sampling approach and may also want to consider a broader spectrum of attraction visitors.

The model developed in this study was only tested in a heritage visitor attraction with enactment and a theme park and did not include all possible service constructs involved in visitors' experience. Therefore generalisability of the results to other attraction contexts should be considered with caution because quality is context specific and attractions differ from type to type. In addition, data collected from the two attractions was pooled because this provides the basis for exploring the commonality and differences between the two attractions. The pooling however limited the set of available attributes to those common to both attractions. Again, the focus of the study was on the relationship between service quality, perceived value, visitor satisfaction and behavioural intentions, and other constructs such as equity (Hutchinson *et al.*, 2009) was not included.

Finally, the project is limited by its regional outlook. The attractions that formed the focus of this research are mainly Midlands-based and are more

likely to attract visitors from their regional catchment area. As stated earlier, quality and value perception are context specific hence it cannot be assumed that the profile of attraction visitors from different regions of the country is similar.

### 5.5 Recommendations for future research

There are a number of opportunities to extend this study and investigate similar composite models. In the first instance, the study supports the literature that states value is a complex multidimensional construct and having been examined from this perspective, this study suggests that there is a need to further investigate the effects of socio-demographic factors on perceived value to improve our knowledge, particularly in the visitor attractions context.

Future studies could investigate whether quality should be treated as a stand-alone construct or part of value. Quality was considered as a stand-alone construct in this study as suggested by Gallarza and Saura (2006); however, the result in this regard is inconclusive. More research is required to ascertain whether quality (functional value) should be conceptualised as part of perceived value, before models put forward by authors such as Oh (2000), Sweeney and Soutar (2001) and Williams and Soutar (2009), incorporating and/or suggesting quality as part of value can be accepted.

In studies where quality is operationalized as a dimension of perceived value e.g. Sanchez *et al*. (2006) and Gallarza and Saura (2006), further research is also needed to clarify the 'quality dimension'. In this regard, research can

attempt to examine the measures employed and subsequently confirm valid and reliable variables to be used in conceptualising this dimension. In addition, the relationship of quality to satisfaction and behavioural intentions needs to be confirmed due to the conflicting results in the literature. For instance Williams and Soutar (2009) found that functional value (usually measured with quality attributes) did not predict satisfaction and behavioural intentions.

One of the significant findings of this study is that age, gender and occupation affect perception of quality and the effects differ between the two attractions. Again, it would be interesting to know the extent to which the influence of these characteristics will differ or are consistent across a range of attractions.

Subsequent research in this area would need a larger sample to confirm the findings of this study and where possible

In addition, future study should expand the scope of the research in terms of the number and type of attractions. This study was limited to two types of visitor attractions - heritage attractions with enactment and theme parks. Future research should examine the external validity of the findings with reference to other types of attractions such as zoological gardens, art galleries, and water parks, religious attractions (e.g. cathedrals and shrine) and workplace attractions (e.g. Cadbury World). This may provide a platform of comparing quality and value perception based on attraction type. Again, this may be done on regional or national basis.

Additionally, future studies in this area, within the attraction context, may want to consider incorporating perceived equity in the conceptual model. This will be in line with Cronin *et al* (2000) call for full examination of the links between service constructs and behavioural intentions in order to establish their true relationship.

Finally, it is recommended that future research examine the direct and indirect influence of individual value dimension on behavioural intentions. The results of this research indicate that the links between the dimensions and behavioural intensions are existent; hence further investigation in this area to evaluate these relationships is a conceptually and theoretically creditable empirical exercise to undertake.

In conclusion, this study explored relevant theoretical foundations and empirically tested relationships between the perceived quality, perceived value and visitor satisfaction in order to determine attraction visitors' behavioural intentions. The research offers a thorough delineation of the constructs and their interelationships, which has both advanced our theoretical knowledge in this area and produced findings which are beneficial to industry practitioners by providing a better understanding of visitor perceptions, repurchase intentions, and subsequent behaviour. This knowledge becomes expedient in understanding how to modify the visitor experience, and to possibly segment visitors to better serve their needs.

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## Appendices

Appendix 1 – Free elicitation instrument

**Blists Hill Vitoria Town**

Were you a first time visitor to Blist Hill during the September 2009 induction?

Yes No (circle the applicable option)

Write down the elements of the attraction which most influenced your experience (using the table below)

Please rank in term of importance with 1 being the *most important*

| Rank | Elements |
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NB: *If you have more points that cannot be accommodated above please continue list at the back of the page.*

What did you particularly like?

What did you particularly dislike?

Which of the element(s) contributed to your overall positive experience of quality?

**Alton Towers**

Have you ever visited the Alton Towers before?

Yes No (circle the applicable option)

How many times?

Once More than once (circle the applicable option)

Write down the elements of the attraction which most influenced your experience (using the table below)

Please rank in term of importance with 1 being the *most important*

| Rank | Elements |
|---|---|
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NB: *If you have more points that cannot be accommodated above please continue list at the back of the page.*

What did you particularly like?

What did you particularly dislike?

Which of the element(s) contributed to your overall positive experience of quality?

Appendix 2 – Final questionnaires

## Alton Towers Survey

Please spare a few minute to complete this questionnaire. It has been designed to find out how visitors to attractions evaluate quality and determine the relationship between perceived service quality, value, customer satisfaction and post-visit behavioural intentions. The results from the study will be used to make recommendations about improving the quality of service in UK visitor attractions. The information you provide will be treated with utmost confidentiality.

Please ONLY complete this questionnaire if you have visited the Alton Towers in the past twelve months.

All completed questionnaires will be entered into a free prize draw for a £100 cash prize. If you prefer not to give your contact details and/or to opt out of the prize draw you can still complete the questionnaire. If you would like to be entered into the prize draw for £100 please provide any of the following contact details: mobile number/e-mail address.

Good luck!

| | |
|---|---|
| **Mobile number:** | |
| **Email address:** | |

**1.**Your recent visit to Alton Towers

Please rate Alton Towers on the following Amenity Attributes using the range of options provided.

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| Working condition of physical facilities and equipment | | | | | | |
| Parking facilities | | | | | | |
| Information provided at the front desk about the attraction | | | | | | |
| Transport services to the site | | | | | | |
| Access for physically | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| challenged to most part of the site | | | | | | |
| Smoking area | | | | | | |
| Effectiveness of signage and direction within the site | | | | | | |
| Availability of toilets | | | | | | |
| Effectiveness of written leaflets in providing enough information about the site and facilities | | | | | | |
| Facilities at the children's play area | | | | | | |
| Access to cash points | | | | | | |
| Efficiency of medical facilities | | | | | | |

**2.** Please rate Alton Towers on the following Staff Attributes using the range of options provided.

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| Appearance of reception staff (neatness) | | | | | | |
| Promptness of services to visitors | | | | | | |
| Staff's ability to provide accurate and correct information | | | | | | |
| Treatment of visitors in a warm and friendly way by staff members | | | | | | |
| Staff's knowledge of product | | | | | | |

**3.** Please rate Alton Tower on the following Physical Setting Attributes using the range of options provided.

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| General cleanliness | | | | | | |
| Visual attractiveness and appeal | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Cleanliness of restrooms | | | | | | |
| Ease of getting around within the site | | | | | | |
| Spectacular nature of the natural/built surroundings | | | | | | |
| The surroundings/atmosphere (pleasant and relaxing nature) | | | | | | |

**4.** Please rate Alton Towers on the following Retail Attributes using the range of options provided.

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| Quality of food on the site | | | | | | |
| Diversity of food & drinks | | | | | | |
| Access to souvenir store | | | | | | |
| Variety of choice in souvenir store | | | | | | |

**5.** Please rate Alton Towers on the following Experience Attributes using the range of options provided.

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| Quality of ride photograph | | | | | | |
| Availability of something for everybody | | | | | | |
| Opportunity to bond with family and friends | | | | | | |
| Efficiency in the way ticket is sold/delivery | | | | | | |
| Opportunity to learn (education) | | | | | | |
| Rides | | | | | | |
| The use of technology | | | | | | |
| Consideration for health and safety | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Information on opening hours | | | | | | |
| Entertainment | | | | | | |
| Management of waiting lines/queues | | | | | | |
| Opportunities to get involved/interactivity | | | | | | |
| Opportunity for recreation | | | | | | |
| Range of activities (much to see and do) | | | | | | |
| Duration of activities | | | | | | |

| **6.** What do you consider the best feature of the attraction? (Please state briefly). |
|---|
| |

| **7.** What is your least favourite feature at the attraction? (Please state briefly). |
|---|
| |

**8.** Please indicate your level of agreement with the following statements.

| | Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree | Don't Know |
|---|---|---|---|---|---|---|
| Acceptable standard of quality | | | | | | |
| The visit was value for money | | | | | | |
| Admission was reasonably priced | | | | | | |
| The visit gave me a sense of wellbeing | | | | | | |
| The visit made me feel happy | | | | | | |
| I was excited with | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| the visit | | | | | | |
| The visit improved the way I am perceived by my peers | | | | | | |
| The visit gave me social approval from others | | | | | | |
| It made me feel adventurous | | | | | | |
| The visit satisfied my curiosity | | | | | | |

**9.** Please indicate your level of agreement with the following statements.

| | Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree | Don't Know |
|---|---|---|---|---|---|---|
| I was delighted with the attraction | | | | | | |
| I was pleased that I decided to visit the attraction | | | | | | |
| What I experienced on visiting the attraction exceeded my expectation | | | | | | |
| Visiting the attraction was exactly what I needed | | | | | | |

**10.** Please indicate your level of agreement with the following statements.

| | Extremely Unlikely | Unlikely | Neither Unlikely Nor likely | Likely | Extremely Likely | Don't Know |
|---|---|---|---|---|---|---|
| I would speak highly of the | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| attraction to friends and relatives | | | | | | |
| I would recommend the attraction to others | | | | | | |
| I would visit the attraction again | | | | | | |

| **11.** Who were you with? |
|---|
| |

| **12.** How many people were in your group? |
|---|
| |

| **13.** What is your gender? |
|---|
| |

| **14.** What is your age group? |
|---|
| 1. 15 – 24<br>2. 25 – 34<br>3. 35 – 44<br>4. 45 – 54<br>5. 55 – 64<br>6. 65 and Over |

| **15.** What is your current job/occupation? |
|---|
| |

# Blists Hill Victorian Town Survey

Please spare a few minute to complete this questionnaire. It has been designed to find out how visitors to attractions evaluate quality and determine the relationship between perceived service quality, value, customer satisfaction and post-visit behavioural intentions. The results from the study will be used to make recommendations about improving the quality of service in UK visitor attractions. The information you provide will be treated with utmost confidentiality.

Please ONLY complete this questionnaire if you have visited the Blists Hill Victorian Town in the past twelve months.

All completed questionnaires will be entered into a free prize draw for a £100 cash prize. If you prefer not to give your contact details and/or to opt out of the prize draw you can still complete the questionnaire. If you would like to be entered into the prize draw for £100 please provide any of the following contact details: mobile number/e-mail address.

Good luck!

| Survey input field | Respondent's answer |
|---|---|
| **Mobile number:** | |
| **Email address:** | |

**1.Your recent visit to Blists Hill Victorian Town**

**Please rate Blists Hill Victorian Town on the following Amenity Attributes using the range of options provided.**

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| Working condition of physical facilities and equipment | | | | | | |
| Parking facilities | | | | | | |
| Information provided at the front desk about the attraction | | | | | | |
| Transport services to the site | | | | | | |
| Access for physically challenged to most part of the site | | | | | | |
| Smoking area | | | | | | |
| Effectiveness of signage and direction within the site | | | | | | |
| Availability of toilets | | | | | | |
| Effectiveness of written leaflets in providing enough information about the site and facilities | | | | | | |
| Facilities at the children's play area | | | | | | |

**2. Please rate Blists Hill Victorian Town on the following Staff Attributes using the range of options provided.**

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| Appearance of reception staff (neatness) | | | | | | |
| Promptness of services to visitors | | | | | | |
| Staff's ability to provide accurate and correct information | | | | | | |
| Treatment of visitors in a warm and friendly way by staff members | | | | | | |
| Staff's knowledge of products | | | | | | |

**3. Please rate Blists Hill Victorian Town on the following Physical Setting Attributes using the range of options provided.**

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| General cleanliness | | | | | | |
| Visual attractiveness and appeal | | | | | | |
| Cleanliness of restrooms | | | | | | |
| Ease of getting around within the site | | | | | | |
| Spectacular nature of the natural/built surroundings | | | | | | |
| The surroundings/atmosphere (pleasant and relaxing nature) | | | | | | |

**4. Please rate Blists Hill Victorian Town on the following Retail Attributes using the range of options provided.**

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| Quality of food on the site | | | | | | |
| Diversity of food & drinks | | | | | | |
| Availability of healthy food options | | | | | | |
| Access to souvenir store | | | | | | |
| Variety of choice in the souvenir store | | | | | | |
| Availability of a range of shops | | | | | | |

**5. Please rate Blists Hill Victorian Town on the following Experience Attributes using the range of options provided.**

| | Very Poor | Poor | Neither Poor Nor Good | Good | Very Good | Don't Know |
|---|---|---|---|---|---|---|
| Availability of something for everybody | | | | | | |
| Opportunity to bond with family and friends | | | | | | |
| Bookings | | | | | | |
| Opportunity to learn (Education) | | | | | | |
| The use of technology | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Information on opening hours | | | | | | |
| Consideration for health and safety | | | | | | |
| Entertainment | | | | | | |
| Management of waiting lines/queues are well managed | | | | | | |
| Novelty | | | | | | |
| Opportunities to get involved/interactivity | | | | | | |
| Opportunity for recreation | | | | | | |
| Range of activities (much to see and do) | | | | | | |
| Duration of activities | | | | | | |
| Costume and setting | | | | | | |
| Availability of all exhibits | | | | | | |
| Narration and explanation of guides and interpreters | | | | | | |
| Authenticity of the experience | | | | | | |
| Insight into Victorian life/ History and culture | | | | | | |
| Clarity of written interpretation | | | | | | |
| Physical state of the exhibits | | | | | | |

**6. What do you consider the best feature of the attraction? (Please state briefly).**

**7. What is your least favourite feature at the attraction? (Please state briefly).**

**8. Please indicate your level of agreement with the following statements.**

| | Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree | Don't Know |
|---|---|---|---|---|---|---|
| Acceptable standard of quality | | | | | | |
| The visit was value for money | | | | | | |
| Admission was reasonably priced | | | | | | |
| The visit made me happy | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| I was excited with the visit | | | | | | |
| The visit improved the way I am perceived by my peers | | | | | | |
| The visit gave me social approval from others | | | | | | |
| It made me feel adventurous | | | | | | |
| The visit satisfied my curiosity | | | | | | |
| The visit was an authentic experience | | | | | | |

**9. Please indicate your level of agreement with the following statements.**

| | Strongly Disagree | Disagree | Neither Agree Nor Disagree | Agree | Strongly Agree | Don't Know |
|---|---|---|---|---|---|---|
| I was delighted with the attraction | | | | | | |
| I was pleased that I decided to visit the attraction | | | | | | |
| The experience I had visiting the attraction exceeded my expectation | | | | | | |
| Visiting the attraction was exactly what I needed | | | | | | |
| Overall I was satisfied with the attraction's offering | | | | | | |

**10. Please indicate your level of agreement with the following statements.**

| | Extremely Unlikely | Unlikely | Neither Unlikely Nor Likely | Likely | Extremely Likely | Don't Know |
|---|---|---|---|---|---|---|
| I would speak highly of the attraction to friends and relatives | | | | | | |
| I would recommend the attraction to others | | | | | | |
| I would visit the attraction again | | | | | | |

**11. Who were you with?**

**12. How many people were in your group?**

**13. What is your gender?**

**14. What is your age group?**

1. 15 – 24
2. 25 – 34
3. 35 – 44
4. 45 – 54
5. 55 – 64
6. 65 and Over

**15. What is your current job / occupation?**

# Appendix 3 Email correspondence with one of the attraction forums

**Message subject:** Permission to post survey on TT forum
**From:** eda7025
**Sent:** Fri 17th Jun 2011 23:46
**To:** Crofty
**Message**
Hi Crofty,
I am writing to you as a group leader on TT. I am a university lecturer in tourism management conducting research to investigate how visitors to attractions evaluate quality and determine the relationship between perceived service quality, value, customer satisfaction and post-visit behavioural intentions. I am at the stage of collecting data for my research. To this end I am seeking your assistance in gathering data for my research. I have two e-questionnaire I would like to post on the discussion forum for interested member to complete.
Data gathered will only be used for academic purpose and make recommendations for industry use. the research in no way has any detrimental effect to any organisations or person. Respondents are free to opt out at any stage if they wish not to continue with the survey.
You may want to note that the research has been granted ethical approval by two UK universities. You may also want to check my profile out on university of Wolverhampton staff profile web page. I am happy to respond to any query if you have any question concerning this matter.
Your help in this regard will be so much appreciated.
Best regards
Ade Oriade
University of Wolverhampton

## Hey, eda7025

**0** new messages
**Inbox | Profile | Logout**
**Message subject:** Re: Permission to post survey on TT forum **Folder:** Outbox
**Forum Index**
**Options**
**Overview**
**Profile**
**Board preferences**
**Private messages**
**» Inbox**
**» Outbox (4)**
**» Sent messages**
**» Compose message**
**» Manage PM drafts**
**» Rules, folders & settings**
**Usergroups**
**Friends & Foes**
**Friends**
**Online**
**No friends online**
**Offline**
**No friends offline**
Previous PM in history | Next PM in history | Previous PM | Next PM
**Message subject:** Re: Permission to post survey on TT forum
**From:** Crofty
**Sent:** Sat 18th Jun 2011 7:27
**To:** eda7025
**Message**
Hi Ade, Thank you for contacting us.
The research topic sounds like a very interesting one, I would be very interested to see what you come up with, especially when Alton Towers and the Merlin brand seem to be taking a turn for the worse lately when it comes to guest satisfaction.
We do have a dedicated topic which enables members to post surveys/questionnaires, it's normally reserved for members who take part in active discussions on the the forums but I see no reason why in this instance we couldn't make an exception.
If you could forward me a link to the survey and I'll get back to you regarding the most appropriate t

## Appendix 4 – Regression results

Regression analysis result (dependent variable – Index of overall value)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .877 | .770 | .588 | 1.667 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .197 | .150 | .205 | 1.308 | .197 | .195 | 5.132 |
| Parking facilities | -.138 | .129 | -.157 | -1.070 | .290 | .223 | 4.483 |
| Information provided at the front desk about the attraction | -.188 | .134 | -.204 | -1.404 | .167 | .227 | 4.407 |
| Transport services to the site | .056 | .098 | .078 | .572 | .570 | .261 | 3.836 |
| Access for physically challenged to most part of the site | .104 | .105 | .138 | .985 | .329 | .245 | 4.086 |
| Smoking area | .041 | .087 | .059 | .470 | .641 | .304 | 3.293 |
| Effectiveness of signage and direction within the site | -.063 | .129 | -.074 | -.492 | .625 | .215 | 4.655 |
| Availability of toilets | .151 | .108 | .206 | 1.392 | .170 | .218 | 4.587 |
| Effectiveness of written leaflets in providing enough information about the site | -.124 | .109 | -.166 | -1.142 | .259 | .227 | 4.398 |
| Facilities at the children's play area | -.128 | .111 | -.173 | -1.155 | .254 | .215 | 4.656 |
| Appearance of reception staff | -.206 | .151 | -.223 | -1.369 | .177 | .180 | 5.560 |
| Promptness of services to visitors | .279 | .130 | .329 | 2.152 | .036 | .205 | 4.878 |
| Staffs ability to provide accurate and correct information | -.375 | .182 | -.426 | -2.058 | .045 | .112 | 8.960 |
| Treatment of visitors in a warm and friendly way by staff members | -.274 | .188 | -.329 | -1.456 | .152 | .094 | 10.669 |
| Staffs knowledge of products | .670 | .203 | .760 | 3.308 | .002 | .091 | 11.019 |
| General cleanliness | -.002 | .138 | -.002 | -.016 | .987 | .251 | 3.977 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Visual attractiveness and appeal | -.065 | .152 | -.063 | -.429 | .670 | .222 | 4.498 |
| Cleanliness of restrooms | -.069 | .109 | -.089 | -.636 | .528 | .242 | 4.135 |
| Ease of getting around within the site | .050 | .102 | .064 | .490 | .626 | .278 | 3.592 |
| Spectacular nature of the natural built surroundings | -.161 | .156 | -.152 | -1.031 | .308 | .220 | 4.535 |
| Pleasant and relaxing nature the surroundings and atmosphere | .109 | .198 | .116 | .548 | .586 | .107 | 9.315 |
| Quality of food on the site | .043 | .125 | .052 | .343 | .733 | .211 | 4.735 |
| Diversity of food and drinks | .025 | .111 | .032 | .229 | .820 | .240 | 4.175 |
| Access to souvenir store | -.110 | .176 | -.118 | -.625 | .535 | .135 | 7.391 |
| Variety of choice in the souvenir store | .195 | .173 | .222 | 1.126 | .266 | .123 | 8.108 |
| Availability of something for everybody | .087 | .132 | .096 | .659 | .513 | .226 | 4.431 |
| Opportunity to bond with family and friends | .035 | .149 | .034 | .232 | .817 | .218 | 4.585 |
| Efficiency in the way ticket is sold/delivery | .093 | .154 | .103 | .603 | .549 | .166 | 6.024 |
| Opportunity to learn | -.003 | .084 | -.005 | -.040 | .968 | .326 | 3.072 |
| The use of technology | -.129 | .167 | -.132 | -.773 | .443 | .165 | 6.065 |
| Information on opening hours | .025 | .151 | .027 | .165 | .869 | .181 | 5.533 |
| Consideration for health and safety | .352 | .179 | .307 | 1.963 | .055 | .196 | 5.111 |
| Entertainment | .106 | .109 | .134 | .976 | .334 | .255 | 3.926 |
| Management of waiting lines and queues are well managed | -.059 | .091 | -.082 | -.648 | .520 | .300 | 3.331 |
| Opportunities to get involved and interactivity | .042 | .124 | .055 | .340 | .735 | .186 | 5.367 |
| Opportunity for recreation | .288 | .148 | .336 | 1.953 | .057 | .162 | 6.182 |
| Range of activities | -.103 | .176 | -.114 | -.585 | .561 | .126 | 7.932 |
| Duration of activities | .167 | .128 | .201 | 1.298 | .201 | .200 | 5.004 |

Regression analysis result (dependent variable – Emotional value)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .581 | .337 | .311 | 1.700 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .325 | .089 | .320 | 3.639 | .000 | .578 | 1.731 |
| Factor 2: Staff attributes | .105 | .081 | .108 | 1.291 | .199 | .637 | 1.569 |
| Factor 3: Operations and environment | .239 | .089 | .241 | 2.700 | .008 | .560 | 1.785 |
| Factor 4: Retail | .095 | .079 | .098 | 1.198 | .233 | .668 | 1.497 |
| Factor 5: Access | -.064 | .068 | -.072 | -.950 | .344 | .789 | 1.268 |
| Factor 6: Ease of use | -.037 | .075 | -.037 | -497 | .620 | .813 | 1.230 |

Regression analysis result (dependent variable – Emotional value)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .881 | .776 | .574 | 1.820 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .496 | .213 | .344 | 2.330 | .025 | .245 | 4.088 |
| Parking facilities | -.152 | .193 | -.111 | -.787 | .436 | .268 | 3.735 |
| Information provided at the front desk about the attraction | -.550 | .213 | -.434 | -2.584 | .013 | .189 | 5.285 |
| Transport services to the site | .218 | .153 | .218 | 1.430 | .160 | .229 | 4.360 |
| Access for physically challenged to most part of the site | .163 | .176 | .157 | .925 | .360 | .184 | 5.428 |
| Smoking area | -.037 | .133 | -.039 | -.280 | .781 | .279 | 3.590 |
| Effectiveness of signage and direction within the site | -.318 | .196 | -.275 | -1.621 | .112 | .186 | 5.387 |
| Availability of toilets | .321 | .170 | .326 | 1.885 | .066 | .178 | 5.621 |
| Effectiveness of written leaflets in providing enough information about the site | -.339 | .203 | -.307 | -1.669 | .102 | .158 | 6.334 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Facilities at the children's play area | -.034 | .155 | -.033 | -.222 | .826 | .248 | 4.034 |
| Appearance of reception staff | -.105 | .217 | -.084 | -.481 | .633 | .176 | 5.667 |
| Promptness of services to visitors | .083 | .187 | .070 | .441 | .661 | .212 | 4.714 |
| Staffs ability to provide accurate and correct information | -.679 | .279 | -.540 | -2.433 | .019 | .108 | 9.249 |
| Treatment of visitors in a warm and friendly way by staff members | -.363 | .306 | -.304 | -1.187 | .242 | .081 | 12.340 |
| Staffs knowledge of products | 1.301 | .328 | .954 | 3.964 | .000 | .092 | 10.863 |
| General cleanliness | .110 | .209 | .076 | .529 | .600 | .262 | 3.823 |
| Visual attractiveness and appeal | .291 | .226 | .162 | 1.285 | .206 | .336 | 2.975 |
| Cleanliness of restrooms | -.133 | .153 | -.123 | -.873 | .388 | .268 | 3.726 |
| Ease of getting around within the site | .006 | .154 | .006 | .042 | .967 | .292 | 3.424 |
| Spectacular nature of the natural built surroundings | .039 | .267 | .027 | .146 | .884 | .155 | 6.433 |
| Pleasant and relaxing nature the surroundings and atmosphere | -.070 | .323 | -.046 | -.218 | .829 | .119 | 8.435 |
| Quality of food on the site | .092 | .187 | .074 | .492 | .626 | .234 | 4.272 |
| Diversity of food and drinks | .044 | .166 | .038 | .262 | .795 | .259 | 3.865 |
| Access to souvenir store | .012 | .289 | .009 | .041 | .968 | .104 | 9.598 |
| Variety of choice in the souvenir store | -.088 | .278 | -.071 | -.317 | .753 | .105 | 9.524 |
| Availability of something for everybody | .279 | .214 | .209 | 1.306 | .199 | .207 | 4.820 |
| Opportunity to bond with family and friends | .283 | .219 | .213 | 1.294 | .203 | .197 | 5.068 |
| Efficiency in the way ticket is sold/delivery | .145 | .250 | .108 | .578 | .566 | .153 | 6.551 |
| Opportunity to learn | -.098 | .118 | -.101 | -.831 | .411 | .361 | 2.770 |
| The use of technology | -.452 | .245 | -.335 | -1.848 | .072 | .162 | 6.166 |
| Information on | .052 | .224 | .042 | .231 | .819 | .164 | 6.079 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| opening hours | | | | | | | |
| Consideration for health and safety | .502 | .268 | .320 | 1.875 | .068 | .183 | 5.476 |
| Entertainment | -.022 | .166 | -.019 | -.132 | .895 | .256 | 3.908 |
| Management of waiting lines and queues are well managed | -.153 | .144 | -.156 | -1.062 | .295 | .247 | 4.041 |
| Opportunities to get involved and interactivity | .095 | .172 | .086 | .549 | .586 | .220 | 4.546 |
| Opportunity for recreation | .262 | .205 | .210 | 1.281 | .207 | .199 | 5.037 |
| Range of activities | -.015 | .261 | -.012 | -.058 | .954 | .126 | 7.927 |
| Duration of activities | .281 | .204 | .235 | 1.377 | .176 | .183 | 5.465 |

Regression analysis result (dependent variable – Monetary value)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .499 | .249 | .218 | 1.794 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .307 | .103 | .279 | 2.973 | .003 | .578 | 1.731 |
| Factor 2: Staff attributes | .172 | .094 | .164 | 1.839 | .068 | .637 | 1.569 |
| Factor 3: Operations and environment | .000 | .103 | .000 | .005 | .996 | .560 | 1.785 |
| Factor 4: Retail | .125 | .092 | .119 | 1.365 | .174 | .668 | 1.497 |
| Factor 5: Access | -.002 | .078 | -.002 | -.028 | .977 | .789 | 1.268 |
| Factor 6: Ease of use | .096 | .086 | .088 | 1.110 | .269 | .813 | 1.230 |

Regression analysis result (dependent variable – Monetary value)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .815 | .665 | .361 | 1.695 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .203 | .275 | .133 | .738 | .465 | .245 | 4.088 |
| Parking facilities | -.079 | .250 | -.055 | -.317 | .753 | .268 | 3.735 |
| Information provided at the front desk about the attraction | -.294 | .275 | -.219 | -1.068 | .292 | .189 | 5.285 |
| Transport services | -.037 | .197 | -.035 | -.187 | .853 | .229 | 4.360 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| to the site | | | | | | | |
| Access for physically challenged to most part of the site | .327 | .227 | .299 | 1.437 | .158 | .184 | 5.428 |
| Smoking area | .094 | .171 | .093 | .548 | .587 | .279 | 3.590 |
| Effectiveness of signage and direction within the site | -.075 | .254 | -.061 | -.295 | .769 | .186 | 5.387 |
| Availability of toilets | .170 | .220 | .164 | .773 | .444 | .178 | 5.621 |
| Effectiveness of written leaflets in providing enough information about the site | -.177 | .262 | -.152 | -.675 | .503 | .158 | 6.334 |
| Facilities at the children's play area | -.112 | .200 | -.101 | -.560 | .578 | .248 | 4.034 |
| Appearance of reception staff | -.240 | .281 | -.182 | -.855 | .397 | .176 | 5.667 |
| Promptness of services to visitors | .331 | .241 | .266 | 1.373 | .177 | .212 | 4.714 |
| Staffs ability to provide accurate and correct information | -.318 | .360 | -.240 | -.883 | .382 | .108 | 9.249 |
| Treatment of visitors in a warm and friendly way by staff members | -.278 | .395 | -.220 | -.702 | .486 | .081 | 12.340 |
| Staffs knowledge of products | .955 | .424 | .664 | 2.254 | .029 | .092 | 10.863 |
| General cleanliness | -.076 | .270 | -.049 | -.282 | .779 | .262 | 3.823 |
| Visual attractiveness and appeal | -.304 | .292 | -.160 | -1.040 | .304 | .336 | 2.975 |
| Cleanliness of restrooms | -.083 | .197 | -.072 | -.419 | .677 | .268 | 3.726 |
| Ease of getting around within the site | -.008 | .199 | -.006 | -.039 | .969 | .292 | 3.424 |
| Spectacular nature of the natural built surroundings | -.460 | .344 | -.303 | -1.337 | .188 | .155 | 6.433 |
| Pleasant and relaxing nature the surroundings and atmosphere | .247 | .417 | .154 | .592 | .557 | .119 | 8.435 |
| Quality of food on the site | .148 | .241 | .113 | .612 | .544 | .234 | 4.272 |
| Diversity of food and drinks | -.164 | .215 | -.134 | -.762 | .451 | .259 | 3.865 |
| Access to souvenir store | -.170 | .373 | -.126 | -.456 | .651 | .104 | 9.598 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Variety of choice in the souvenir store | .332 | .359 | .255 | .926 | .360 | .105 | 9.524 |
| Availability of something for everybody | .031 | .276 | .022 | .112 | .911 | .207 | 4.820 |
| Opportunity to bond with family and friends | -.175 | .283 | -.125 | -.620 | .538 | .197 | 5.068 |
| Efficiency in the way ticket is sold/delivery | .142 | .323 | .101 | .440 | .662 | .153 | 6.551 |
| Opportunity to learn | -.135 | .152 | -.132 | -.891 | .378 | .361 | 2.770 |
| The use of technology | -.159 | .316 | -.112 | -.504 | .617 | .162 | 6.166 |
| Information on opening hours | .278 | .289 | .212 | .964 | .341 | .164 | 6.079 |
| Consideration for health and safety | .723 | .345 | .437 | 2.092 | .042 | .183 | 5.476 |
| Entertainment | -.002 | .214 | -.002 | -.009 | .993 | .256 | 3.908 |
| Management of waiting lines and queues are well managed | -.079 | .186 | -.076 | -.424 | .674 | .247 | 4.041 |
| Opportunities to get involved and interactivity | .181 | .222 | .155 | .814 | .420 | .220 | 4.546 |
| Opportunity for recreation | .265 | .265 | .201 | 1.003 | .322 | .199 | 5.037 |
| Range of activities | -.144 | .337 | -.107 | -.427 | .671 | .126 | 7.927 |
| Duration of activities | .233 | .263 | .185 | .885 | .381 | .183 | 5.465 |

Regression analysis result (dependent variable – Social and Personal value)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .575 | .330 | .303 | 1.684 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .445 | .088 | .448 | 5.061 | .000 | .578 | 1.731 |
| Factor 2: Staff attributes | .020 | .080 | .021 | .254 | .800 | .637 | 1.569 |
| Factor 3: Operations and environment | .092 | .087 | .094 | 1.050 | .295 | .560 | 1.785 |
| Factor 4: Retail | .108 | .078 | .114 | 1.386 | .168 | .668 | 1.497 |
| Factor 5: Access | -.0087 | .067 | -.009 | -.120 | .904 | .789 | 1.268 |
| Factor 6: Ease of use | -.010 | .074 | -.010 | -.134 | .893 | .813 | 1.230 |

Regression analysis result (dependent variable – Social and Personal value)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .798 | .637 | .308 | 1.977 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .221 | .242 | .172 | .913 | .367 | .245 | 4.088 |
| Parking facilities | -.202 | .220 | -.166 | -.922 | .362 | .268 | 3.735 |
| Information provided at the front desk about the attraction | -.302 | .242 | -.267 | -1.248 | .219 | .189 | 5.285 |
| Transport services to the site | .149 | .173 | .167 | .861 | .394 | .229 | 4.360 |
| Access for physically challenged to most part of the site | .047 | .200 | .051 | .237 | .814 | .184 | 5.428 |
| Smoking area | .153 | .151 | .179 | 1.016 | .315 | .279 | 3.590 |
| Effectiveness of signage and direction within the site | -.028 | .223 | -.027 | -.127 | .899 | .186 | 5.387 |
| Availability of toilets | .180 | .193 | .206 | .933 | .356 | .178 | 5.621 |
| Effectiveness of written leaflets in providing enough information about the site | -.169 | .230 | -.171 | -.733 | .468 | .158 | 6.334 |
| Facilities at the children's play area | -.190 | .176 | -.202 | -1.084 | .285 | .248 | 4.034 |
| Appearance of reception staff | -.263 | .247 | -.236 | -1.065 | .293 | .176 | 5.667 |
| Promptness of services to visitors | .360 | .212 | .343 | 1.700 | .097 | .212 | 4.714 |
| Staffs ability to provide accurate and correct information | -.627 | .316 | -.560 | -1.981 | .054 | .108 | 9.249 |
| Treatment of visitors in a warm and friendly way by staff members | -.426 | .347 | -.401 | -1.226 | .227 | .081 | 12.340 |
| Staffs knowledge of products | .855 | .373 | .704 | 2.296 | .027 | .092 | 10.863 |
| General cleanliness | -.020 | .237 | -.015 | -.084 | .933 | .262 | 3.823 |
| Visual | -.070 | .257 | -.044 | -.271 | .787 | .336 | 2.975 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| attractiveness and appeal | | | | | | | |
| Cleanliness of restrooms | -.018 | .173 | -.019 | -.105 | .917 | .268 | 3.726 |
| Ease of getting around within the site | .049 | .175 | .048 | .278 | .783 | .292 | 3.424 |
| Spectacular nature of the natural built surroundings | -.289 | .302 | -.226 | -.957 | .344 | .155 | 6.433 |
| Pleasant and relaxing nature the surroundings and atmosphere | .153 | .366 | .113 | .418 | .678 | .119 | 8.435 |
| Quality of food on the site | -.137 | .212 | -.124 | -.647 | .521 | .234 | 4.272 |
| Diversity of food and drinks | .150 | .189 | .145 | .793 | .432 | .259 | 3.865 |
| Access to souvenir store | .050 | .328 | .044 | .154 | .878 | .104 | 9.598 |
| Variety of choice in the souvenir store | .034 | .315 | .031 | .108 | .915 | .105 | 9.524 |
| Availability of something for everybody | .334 | .242 | .281 | 1.378 | .176 | .207 | 4.820 |
| Opportunity to bond with family and friends | .234 | .249 | .197 | .939 | .353 | .197 | 5.068 |
| Efficiency in the way ticket is sold/delivery | .027 | .284 | .023 | .095 | .925 | .153 | 6.551 |
| Opportunity to learn | .043 | .133 | .050 | .324 | .748 | .361 | 2.770 |
| The use of technology | -.310 | .278 | -.258 | -1.118 | .270 | .162 | 6.166 |
| Information on opening hours | .018 | .254 | .017 | .073 | .942 | .164 | 6.079 |
| Consideration for health and safety | .397 | .304 | .285 | 1.308 | .198 | .183 | 5.476 |
| Entertainment | .325 | .188 | .317 | 1.727 | .092 | .256 | 3.908 |
| Management of waiting lines and queues are well managed | -.002 | .163 | -.003 | -.014 | .989 | .247 | 4.041 |
| Opportunities to get involved and interactivity | .031 | .196 | .031 | .159 | .875 | .220 | 4.546 |
| Opportunity for recreation | .320 | .232 | .288 | 1.378 | .175 | .199 | 5.037 |
| Range of activities | -.440 | .296 | -.390 | -1.488 | .144 | .126 | 7.927 |
| Duration of activities | .388 | .231 | .364 | 1.675 | .101 | .183 | 5.465 |

Regression analysis result (dependent variable – Val 1)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .559 | .313 | .288 | 1.857 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .385 | .094 | .348 | 4.106 | .000 | .573 | 1.746 |
| Factor 2: Staff attributes | .186 | .087 | .171 | 2.134 | .034 | .642 | 1.557 |
| Factor 3: Operations and environment | -.112 | .094 | -.098 | -1.196 | .233 | .608 | 1.645 |
| Factor 4: Retail | .188 | .087 | .173 | 2.172 | .031 | .650 | 1.537 |
| Factor 5: Access | -.013 | .077 | -.012 | -.164 | .870 | .766 | 1.305 |
| Factor 6: Ease of use | .107 | .083 | .095 | 1.291 | .198 | .761 | 1.314 |

Regression analysis result (dependent variable – Val 1)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .885 | .783 | .607 | 1.841 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .163 | .215 | .117 | .759 | .451 | .195 | 5.135 |
| Parking facilities | -.266 | .184 | -.206 | -1.441 | .156 | .226 | 4.428 |
| Information provided at the front desk about the attraction | .185 | .193 | .136 | .957 | .343 | .228 | 4.395 |
| Transport services to the site | -.081 | .142 | -.077 | -.572 | .570 | .256 | 3.913 |
| Access for physically challenged to most part of the site | .295 | .155 | .268 | 1.897 | .064 | .231 | 4.328 |
| Smoking area | .007 | .125 | .007 | .057 | .955 | .301 | 3.321 |
| Effectiveness of signage and direction within the site | -.259 | .186 | -.207 | -1.389 | .171 | .209 | 4.788 |
| Availability of toilets | .025 | .156 | .023 | .160 | .874 | .216 | 4.620 |
| Effectiveness of written leaflets in providing enough information about the site | -.039 | .155 | -.036 | -.253 | .802 | .228 | 4.377 |
| Facilities at the | .078 | .159 | .072 | .488 | .628 | .215 | 4.651 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| children's play area | | | | | | | |
| Appearance of reception staff | -.271 | .215 | -.199 | -1.260 | .214 | .185 | 5.419 |
| Promptness of services to visitors | .259 | .193 | .202 | 1.343 | .186 | .204 | 4.908 |
| Staffs ability to provide accurate and correct information | .127 | .260 | .098 | .487 | .628 | .114 | 8.748 |
| Treatment of visitors in a warm and friendly way by staff members | -.599 | .268 | -.477 | -2.232 | .030 | .101 | 9.883 |
| Staffs knowledge of products | .793 | .290 | .592 | 2.735 | .009 | .099 | 10.137 |
| General cleanliness | .005 | .198 | .003 | .023 | .982 | .275 | 3.634 |
| Visual attractiveness and appeal | -.132 | .219 | -.088 | -.603 | .549 | .218 | 4.587 |
| Cleanliness of restrooms | -.163 | .157 | -.141 | -1.044 | .302 | .252 | 3.963 |
| Ease of getting around within the site | .032 | .149 | .028 | .217 | .829 | .270 | 3.710 |
| Spectacular nature of the natural built surroundings | -.322 | .225 | -.208 | -1.431 | .159 | .218 | 4.578 |
| Pleasant and relaxing nature the surroundings and atmosphere | -.018 | .283 | -.013 | -.065 | .949 | .108 | 9.249 |
| Quality of food on the site | .407 | .179 | .326 | 2.278 | .027 | .225 | 4.439 |
| Diversity of food and drinks | -.109 | .161 | -.092 | -.675 | .503 | .248 | 4.039 |
| Access to souvenir store | -.182 | .256 | -.132 | -.711 | .481 | .134 | 7.462 |
| Variety of choice in the souvenir store | .326 | .258 | .245 | 1.261 | .213 | .123 | 8.145 |
| Availability of something for everybody | .090 | .189 | .068 | .479 | .634 | .227 | 4.396 |
| Opportunity to bond with family and friends | -.382 | .216 | -.260 | -1.768 | .084 | .214 | 4.678 |
| Efficiency in the way ticket is sold/delivery | -.050 | .224 | -.038 | -.224 | .824 | .163 | 6.123 |
| Opportunity to learn | .008 | .120 | .008 | .065 | .949 | .330 | 3.033 |
| The use of technology | .027 | .240 | .019 | .111 | .912 | .165 | 6.063 |
| Information on opening hours | -.207 | .216 | -.153 | -.958 | .343 | .182 | 5.488 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Consideration for health and safety | .697 | .256 | .417 | 2.725 | .009 | .197 | 5.065 |
| Entertainment | .162 | .155 | .140 | 1.040 | .303 | .257 | 3.898 |
| Management of waiting lines and queues are well managed | -.191 | .132 | -.181 | -1.447 | .155 | .294 | 3.406 |
| Opportunities to get involved and interactivity | -.126 | .178 | -.111 | -.707 | .483 | .188 | 5.313 |
| Opportunity for recreation | .416 | .212 | .332 | 1.966 | .055 | .162 | 6.158 |
| Range of activities | .058 | .251 | .044 | .232 | .818 | .127 | 7.852 |
| Duration of activities | .446 | .183 | .368 | 2.434 | .019 | .202 | 4.946 |

Regression analysis result (dependent variable – Val 2)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .507 | .257 | .230 | 1.835 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .345 | .103 | .293 | 3.347 | .001 | .585 | 1.710 |
| Factor 2: Staff attributes | .165 | .093 | .146 | 1.771 | .078 | .662 | 1.509 |
| Factor 3: Operations and environment | -.070 | .103 | -.058 | -.682 | .496 | .626 | 1.597 |
| Factor 4: Retail | .160 | .094 | .140 | 1.704 | .090 | .660 | 1.515 |
| Factor 5: Access | -.010 | .086 | -.009 | -.113 | .911 | .765 | 1.307 |
| Factor 6: Ease of use | .155 | .092 | .130 | 1.696 | .092 | .764 | 1.309 |

Regression analysis result (dependent variable – Val 2)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .793 | .629 | .330 | 1.769 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .250 | .308 | .165 | .811 | .422 | .191 | 5.248 |
| Parking facilities | -.227 | .262 | -.161 | -.866 | .391 | .228 | 4.390 |
| Information provided at the front desk about the attraction | -.506 | .287 | -.347 | -1.762 | .085 | .203 | 4.922 |
| Transport services to the site | -.028 | .203 | -.024 | -.136 | .892 | .250 | 3.993 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Access for physically challenged to most part of the site | .247 | .216 | .207 | 1.143 | .259 | .241 | 4.151 |
| Smoking area | .265 | .176 | .242 | 1.501 | .140 | .304 | 3.290 |
| Effectiveness of signage and direction within the site | -.045 | .263 | -.033 | -.171 | .865 | .212 | 4.726 |
| Availability of toilets | .262 | .221 | .227 | 1.186 | .242 | .215 | 4.646 |
| Effectiveness of written leaflets in providing enough information about the site | -.088 | .229 | -.074 | -.383 | .704 | .212 | 4.720 |
| Facilities at the children's play area | -.096 | .226 | -.081 | -.426 | .672 | .216 | 4.635 |
| Appearance of reception staff | -.145 | .306 | -.099 | -.473 | .638 | .180 | 5.570 |
| Promptness of services to visitors | .334 | .264 | .249 | 1.268 | .211 | .204 | 4.899 |
| Staffs ability to provide accurate and correct information | -.479 | .371 | -.344 | -1.289 | .204 | .111 | 9.036 |
| Treatment of visitors in a warm and friendly way by staff members | -.334 | .389 | -.251 | -.858 | .395 | .092 | 10.875 |
| Staffs knowledge of products | .947 | .465 | .671 | 2.039 | .047 | .073 | 13.726 |
| General cleanliness | -.236 | .283 | -.148 | -.834 | .408 | .252 | 3.970 |
| Visual attractiveness and appeal | -.490 | .308 | -.300 | -1.591 | .118 | .222 | 4.510 |
| Cleanliness of restrooms | -.038 | .221 | -.031 | -.172 | .864 | .245 | 4.084 |
| Ease of getting around within the site | -.054 | .208 | -.044 | -.261 | .795 | .278 | 3.601 |
| Spectacular nature of the natural built surroundings | -.711 | .318 | -.423 | -2.236 | .030 | .220 | 4.543 |
| Pleasant and relaxing nature the surroundings and atmosphere | .448 | .405 | .301 | 1.104 | .275 | .106 | 9.412 |
| Quality of food on the site | -.009 | .255 | -.006 | -.034 | .973 | .212 | 4.717 |
| Diversity of food and drinks | -.110 | .228 | -.088 | -.485 | .630 | .239 | 4.191 |
| Access to souvenir store | .034 | .358 | .023 | .096 | .924 | .136 | 7.366 |
| Variety of choice | .204 | .363 | .146 | .563 | .576 | .117 | 8.556 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| in the souvenir store | | | | | | | |
| Availability of something for everybody | .090 | .305 | .060 | .295 | .769 | .193 | 5.190 |
| Opportunity to bond with family and friends | -.216 | .303 | -.136 | -.714 | .479 | .218 | 4.579 |
| Efficiency in the way ticket is sold/delivery | .315 | .318 | .220 | .991 | .327 | .160 | 6.242 |
| Opportunity to learn | -.137 | .171 | -.124 | -.801 | .427 | .329 | 3.040 |
| The use of technology | -.179 | .359 | -.115 | -.500 | .619 | .149 | 6.721 |
| Information on opening hours | .506 | .307 | .344 | 1.646 | .106 | .180 | 5.551 |
| Consideration for health and safety | .628 | .379 | .346 | 1.656 | .104 | .180 | 5.541 |
| Entertainment | .064 | .223 | .051 | .287 | .776 | .250 | 4.006 |
| Management of waiting lines and queues are well managed | -.057 | .191 | -.050 | -.297 | .768 | .281 | 3.564 |
| Opportunities to get involved and interactivity | .201 | .252 | .163 | .798 | .429 | .188 | 5.310 |
| Opportunity for recreation | .295 | .300 | .217 | .984 | .330 | .163 | 6.139 |
| Range of activities | -.347 | .366 | -.242 | -.948 | .348 | .121 | 8.268 |
| Duration of activities | .408 | .285 | .309 | 1.433 | .158 | .170 | 5.885 |

Regression analysis result (dependent variable – Val 3)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .566 | .320 | .296 | 2.064 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .242 | .064 | .314 | 3.782 | .000 | .586 | 1.706 |
| Factor 2: Staff attributes | .147 | .058 | .198 | 2.543 | .012 | .664 | 1.505 |
| Factor 3: Operations and environment | .131 | .064 | .165 | 2.057 | .041 | .626 | 1.596 |
| Factor 4: Retail | .045 | .059 | .060 | .762 | .447 | .659 | 1.518 |
| Factor 5: Access | -.032 | .053 | -.044 | -.604 | .547 | .766 | 1.305 |
| Factor 6: Ease of use | -5.888E-5 | .057 | .000 | -.001 | .999 | .765 | 1.307 |

Regression analysis result (dependent variable – Val 3)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .853 | .727 | .511 | 1.990 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .225 | .195 | .197 | 1.153 | .255 | .195 | 5.132 |
| Parking facilities | .002 | .167 | .002 | .013 | .990 | .223 | 4.483 |
| Information provided at the front desk about the attraction | -.179 | .174 | -.163 | -1.030 | .308 | .227 | 4.407 |
| Transport services to the site | .156 | .127 | .181 | 1.225 | .226 | .261 | 3.836 |
| Access for physically challenged to most part of the site | -.056 | .136 | -.063 | -.410 | .683 | .245 | 4.086 |
| Smoking area | -.054 | .113 | -.066 | -.479 | .634 | .304 | 3.293 |
| Effectiveness of signage and direction within the site | -.186 | .167 | -.182 | -1.117 | .269 | .215 | 4.655 |
| Availability of toilets | .191 | .140 | .220 | 1.362 | .179 | .218 | 4.587 |
| Effectiveness of written leaflets in providing enough information about the site | -.148 | .141 | -.166 | -1.050 | .299 | .227 | 4.398 |
| Facilities at the children's play area | -.024 | .144 | -.027 | -.163 | .871 | .215 | 4.656 |
| Appearance of reception staff | .095 | .195 | .086 | .486 | .629 | .180 | 5.560 |
| Promptness of services to visitors | .078 | .169 | .077 | .464 | .645 | .205 | 4.878 |
| Staffs ability to provide accurate and correct information | -.558 | .237 | -.532 | -2.358 | .023 | .112 | 8.960 |
| Treatment of visitors in a warm and friendly way by staff members | -.445 | .244 | -.449 | -1.823 | .074 | .094 | 10.669 |
| Staffs knowledge of products | .972 | .263 | .925 | 3.694 | .001 | .091 | 11.019 |
| General cleanliness | .063 | .179 | .053 | .351 | .727 | .251 | 3.977 |
| Visual attractiveness and appeal | .189 | .197 | .154 | .964 | .340 | .222 | 4.498 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cleanliness of restrooms | -.183 | .142 | -.198 | -1.291 | .203 | .242 | 4.135 |
| Ease of getting around within the site | .019 | .133 | .021 | .145 | .885 | .278 | 3.592 |
| Spectacular nature of the natural built surroundings | .188 | .202 | .149 | .927 | .358 | .220 | 4.535 |
| Pleasant and relaxing nature the surroundings and atmosphere | .030 | .257 | .027 | .117 | .907 | .107 | 9.315 |
| Quality of food on the site | .298 | .162 | .301 | 1.837 | .072 | .211 | 4.735 |
| Diversity of food and drinks | -.028 | .144 | -.030 | -.195 | .846 | .240 | 4.175 |
| Access to souvenir store | -.287 | .228 | -.258 | -1.258 | .215 | .135 | 7.391 |
| Variety of choice in the souvenir store | .088 | .225 | .084 | .391 | .697 | .123 | 8.108 |
| Availability of something for everybody | .170 | .171 | .157 | .991 | .327 | .226 | 4.431 |
| Opportunity to bond with family and friends | .041 | .194 | .034 | .210 | .834 | .218 | 4.585 |
| Efficiency in the way ticket is sold/delivery | .177 | .200 | .163 | .883 | .382 | .166 | 6.024 |
| Opportunity to learn | -.014 | .109 | -.017 | -.126 | .900 | .326 | 3.072 |
| The use of technology | -.093 | .217 | -.079 | -.428 | .671 | .165 | 6.065 |
| Information on opening hours | -.044 | .196 | -.039 | -.222 | .825 | .181 | 5.533 |
| Consideration for health and safety | -.022 | .232 | -.016 | -.094 | .925 | .196 | 5.111 |
| Entertainment | -.030 | .141 | -.032 | -.213 | .832 | .255 | 3.926 |
| Management of waiting lines and queues are well managed | .018 | .118 | .021 | .154 | .878 | .300 | 3.331 |
| Opportunities to get involved and interactivity | .123 | .161 | .133 | .763 | .449 | .186 | 5.367 |
| Opportunity for recreation | .262 | .192 | .256 | 1.366 | .178 | .162 | 6.182 |
| Range of activities | .129 | .228 | .120 | .566 | .574 | .126 | 7.932 |
| Duration of activities | -.074 | .167 | -.074 | -.441 | .661 | .200 | 5.004 |

Regression analysis result (dependent variable – Val 4)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .511 | .261 | .235 | 1.597 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .172 | .066 | .225 | 2.599 | .010 | .586 | 1.706 |
| Factor 2: Staff attributes | .099 | .060 | .136 | 1.667 | .097 | .664 | 1.505 |
| Factor 3: Operations and environment | .111 | .066 | .141 | 1.684 | .094 | .626 | 1.596 |
| Factor 4: Retail | .160 | .061 | .216 | 2.644 | .009 | .659 | 1.518 |
| Factor 5: Access | -.025 | .055 | -.034 | -.446 | .656 | .766 | 1.305 |
| Factor 6: Ease of use | -.069 | .059 | -.088 | -1.167 | .245 | .765 | 1.307 |

Regression analysis result (dependent variable – Val 4)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .841 | .708 | .477 | 1.701 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .383 | .173 | .390 | 2.209 | .032 | .195 | 5.132 |
| Parking facilities | -.272 | .149 | -.302 | -1.830 | .073 | .223 | 4.483 |
| Information provided at the front desk about the attraction | -.292 | .154 | -.310 | -1.893 | .064 | .227 | 4.407 |
| Transport services to the site | .212 | .113 | .287 | 1.875 | .067 | .261 | 3.836 |
| Access for physically challenged to most part of the site | -.028 | .121 | -.037 | -.233 | .816 | .245 | 4.086 |
| Smoking area | -.012 | .100 | -.018 | -.125 | .901 | .304 | 3.293 |
| Effectiveness of signage and direction within the site | -.111 | .148 | -.126 | -.747 | .459 | .215 | 4.655 |
| Availability of toilets | .250 | .125 | .335 | 2.007 | .050 | .218 | 4.587 |
| Effectiveness of | - | .125 | -.357 | - | .034 | .227 | 4.398 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| written leaflets in providing enough information about the site | .273 | | | 2.182 | | | |
| Facilities at the children's play area | -.043 | .128 | -.057 | -.338 | .736 | .215 | 4.656 |
| Appearance of reception staff | -.109 | .174 | -.115 | -.626 | .534 | .180 | 5.560 |
| Promptness of services to visitors | .037 | .150 | .043 | .247 | .806 | .205 | 4.878 |
| Staffs ability to provide accurate and correct information | -.321 | .210 | -.357 | -1.529 | .133 | .112 | 8.960 |
| Treatment of visitors in a warm and friendly way by staff members | -.116 | .217 | -.137 | -.536 | .594 | .094 | 10.669 |
| Staffs knowledge of products | .550 | .234 | .610 | 2.356 | .023 | .091 | 11.019 |
| General cleanliness | .036 | .159 | .036 | .229 | .820 | .251 | 3.977 |
| Visual attractiveness and appeal | .221 | .175 | .210 | 1.268 | .211 | .222 | 4.498 |
| Cleanliness of restrooms | .046 | .126 | .058 | .367 | .715 | .242 | 4.135 |
| Ease of getting around within the site | -.123 | .118 | -.155 | -1.047 | .300 | .278 | 3.592 |
| Spectacular nature of the natural built surroundings | .028 | .180 | .026 | .156 | .877 | .220 | 4.535 |
| Pleasant and relaxing nature the surroundings and atmosphere | .006 | .229 | .006 | .024 | .981 | .107 | 9.315 |
| Quality of food on the site | -.048 | .144 | -.057 | -.335 | .739 | .211 | 4.735 |
| Diversity of food and drinks | .049 | .128 | .061 | .384 | .703 | .240 | 4.175 |
| Access to souvenir store | .250 | .203 | .261 | 1.230 | .225 | .135 | 7.391 |
| Variety of choice in the souvenir store | -.058 | .200 | -.064 | -.290 | .773 | .123 | 8.108 |
| Availability of something for everybody | -.031 | .152 | -.034 | -.205 | .839 | .226 | 4.431 |
| Opportunity to bond with family and friends | .275 | .172 | .267 | 1.599 | .116 | .218 | 4.585 |
| Efficiency in the | .29 | .178 | .321 | 1.676 | .100 | .166 | 6.024 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| way ticket is sold/delivery | 8 | | | | | | |
| Opportunity to learn | -.142 | .097 | -.200 | -1.466 | .149 | .326 | 3.072 |
| The use of technology | -.309 | .193 | -.307 | -1.600 | .116 | .165 | 6.065 |
| Information on opening hours | .021 | .174 | .022 | .120 | .905 | .181 | 5.533 |
| Consideration for health and safety | .340 | .207 | .290 | 1.645 | .106 | .196 | 5.111 |
| Entertainment | -.089 | .125 | -.109 | -.706 | .484 | .255 | 3.926 |
| Management of waiting lines and queues are well managed | -.053 | .105 | -.072 | -.503 | .617 | .300 | 3.331 |
| Opportunities to get involved and interactivity | -.005 | .143 | -.006 | -.033 | .974 | .186 | 5.367 |
| Opportunity for recreation | .177 | .170 | .202 | 1.043 | .302 | .162 | 6.182 |
| Range of activities | .002 | .203 | .002 | .009 | .993 | .126 | 7.932 |
| Duration of activities | .151 | .148 | .178 | 1.018 | .314 | .200 | 5.004 |

Regression analysis result (dependent variable – Val 5)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .482 | .232 | .203 | 1.734 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .302 | .087 | .317 | 3.485 | .001 | .588 | 1.700 |
| Factor 2: Staff attributes | .098 | .080 | .106 | 1.224 | .223 | .645 | 1.551 |
| Factor 3: Operations and environment | .077 | .089 | .079 | .868 | .387 | .594 | 1.684 |
| Factor 4: Retail | .080 | .082 | .086 | .983 | .327 | .640 | 1.562 |
| Factor 5: Access | -.015 | .072 | -.017 | -.214 | .831 | .760 | 1.316 |
| Factor 6: Ease of use | .025 | .078 | .025 | .319 | .750 | .773 | 1.293 |

Regression analysis result (dependent variable – Val 5)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .772 | .597 | .270 | 1.979 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .150 | .240 | .131 | .622 | .537 | .195 | 5.133 |
| Parking facilities | -.053 | .211 | -.050 | -.252 | .802 | .217 | 4.616 |
| Information provided at the front desk about the attraction | -.079 | .223 | -.071 | -.354 | .725 | .214 | 4.665 |
| Transport services to the site | .093 | .161 | .107 | .575 | .568 | .246 | 4.059 |
| Access for physically challenged to most part of the site | -.006 | .174 | -.007 | -.034 | .973 | .230 | 4.340 |
| Smoking area | -.004 | .141 | -.004 | -.026 | .980 | .296 | 3.376 |
| Effectiveness of signage and direction within the site | -.002 | .214 | -.002 | -.011 | .992 | .203 | 4.933 |
| Availability of toilets | .175 | .176 | .201 | .992 | .326 | .209 | 4.790 |
| Effectiveness of written leaflets in providing enough information about the site | -.081 | .182 | -.091 | -.448 | .656 | .210 | 4.766 |
| Facilities at the children's play area | -.329 | .177 | -.369 | -1.854 | .070 | .217 | 4.618 |
| Appearance of reception staff | -.268 | .248 | -.242 | -1.080 | .286 | .171 | 5.835 |
| Promptness of services to visitors | .295 | .208 | .291 | 1.419 | .162 | .204 | 4.898 |
| Staffs ability to provide accurate and correct information | -.639 | .315 | -.583 | -2.028 | .048 | .104 | 9.622 |
| Treatment of visitors in a warm and friendly way by staff members | -.301 | .325 | -.303 | -.927 | .359 | .080 | 12.454 |
| Staffs knowledge of products | .721 | .332 | .655 | 2.171 | .035 | .094 | 10.605 |
| General cleanliness | .199 | .223 | .166 | .892 | .377 | .247 | 4.042 |
| Visual attractiveness and appeal | -.161 | .243 | -.130 | -.662 | .511 | .223 | 4.493 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cleanliness of restrooms | -.115 | .174 | -.125 | -.661 | .512 | .241 | 4.144 |
| Ease of getting around within the site | .136 | .164 | .146 | .832 | .410 | .279 | 3.584 |
| Spectacular nature of the natural built surroundings | -.119 | .264 | -.094 | -.451 | .654 | .199 | 5.034 |
| Pleasant and relaxing nature the surroundings and atmosphere | .025 | .317 | .022 | .079 | .937 | .108 | 9.280 |
| Quality of food on the site | -.161 | .200 | -.162 | -.807 | .424 | .213 | 4.694 |
| Diversity of food and drinks | .027 | .179 | .029 | .152 | .880 | .236 | 4.234 |
| Access to souvenir store | -.166 | .281 | -.148 | -.590 | .558 | .137 | 7.306 |
| Variety of choice in the souvenir store | .363 | .280 | .345 | 1.297 | .201 | .121 | 8.258 |
| Availability of something for everybody | .389 | .211 | .358 | 1.838 | .072 | .227 | 4.409 |
| Opportunity to bond with family and friends | .308 | .245 | .255 | 1.258 | .215 | .209 | 4.795 |
| Efficiency in the way ticket is sold/delivery | .004 | .262 | .004 | .015 | .988 | .150 | 6.676 |
| Opportunity to learn | .127 | .135 | .153 | .938 | .353 | .321 | 3.112 |
| The use of technology | -.210 | .268 | -.179 | -.784 | .437 | .165 | 6.051 |
| Information on opening hours | .173 | .248 | .155 | .695 | .490 | .172 | 5.804 |
| Consideration for health and safety | .247 | .287 | .180 | .863 | .393 | .197 | 5.081 |
| Entertainment | .090 | .174 | .095 | .519 | .607 | .256 | 3.906 |
| Management of waiting lines and queues are well managed | .014 | .146 | .016 | .094 | .925 | .299 | 3.340 |
| Opportunities to get involved and interactivity | .111 | .199 | .119 | .559 | .579 | .189 | 5.299 |
| Opportunity for recreation | .445 | .236 | .432 | 1.888 | .065 | .164 | 6.109 |
| Range of activities | -.364 | .281 | -.337 | -1.296 | .201 | .127 | 7.861 |
| Duration of activities | -.091 | .207 | -.092 | -.442 | .660 | .199 | 5.032 |

Regression analysis result (dependent variable – Val 6)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .498 | .248 | .219 | 1.707 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .412 | .094 | .401 | 4.360 | .000 | .566 | 1.768 |
| Factor 2: Staff attributes | -.021 | .084 | -.020 | -.244 | .807 | .689 | 1.451 |
| Factor 3: Operations and environment | .076 | .096 | .070 | .790 | .431 | .602 | 1.661 |
| Factor 4: Retail | .141 | .087 | .138 | 1.613 | .109 | .653 | 1.531 |
| Factor 5: Access | .019 | .077 | .020 | .251 | .802 | .769 | 1.300 |
| Factor 6: Ease of use | -.073 | .084 | -.068 | -.862 | .390 | .774 | 1.292 |

Regression analysis result (dependent variable – Val 6)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .726 | .526 | .135 | 1.939 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .015 | .281 | .012 | .054 | .957 | .199 | 5.016 |
| Parking facilities | -.276 | .252 | -.237 | -1.094 | .280 | .220 | 4.556 |
| Information provided at the front desk about the attraction | -.103 | .253 | -.088 | -.408 | .685 | .223 | 4.476 |
| Transport services to the site | .065 | .186 | .071 | .350 | .728 | .251 | 3.980 |
| Access for physically challenged to most part of the site | .042 | .210 | .043 | .201 | .841 | .224 | 4.471 |
| Smoking area | .216 | .169 | .246 | 1.278 | .208 | .277 | 3.606 |
| Effectiveness of signage and direction within the site | .027 | .241 | .025 | .112 | .911 | .213 | 4.689 |
| Availability of toilets | .077 | .216 | .083 | .355 | .724 | .189 | 5.297 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Effectiveness of written leaflets in providing enough information about the site | -.127 | .236 | -.129 | -.538 | .593 | .179 | 5.598 |
| Facilities at the children's play area | -.096 | .207 | -.102 | -.465 | .644 | .215 | 4.647 |
| Appearance of reception staff | -.192 | .282 | -.164 | -.681 | .499 | .178 | 5.606 |
| Promptness of services to visitors | .416 | .242 | .382 | 1.718 | .093 | .208 | 4.804 |
| Staffs ability to provide accurate and correct information | -.533 | .340 | -.472 | -1.569 | .123 | .114 | 8.781 |
| Treatment of visitors in a warm and friendly way by staff members | -.347 | .359 | -.318 | -.966 | .339 | .095 | 10.537 |
| Staffs knowledge of products | .485 | .376 | .416 | 1.290 | .204 | .099 | 10.113 |
| General cleanliness | -.121 | .255 | -.095 | -.475 | .637 | .259 | 3.855 |
| Visual attractiveness and appeal | -.216 | .295 | -.154 | -.733 | .467 | .234 | 4.267 |
| Cleanliness of restrooms | .043 | .202 | .043 | .211 | .834 | .244 | 4.105 |
| Ease of getting around within the site | .002 | .199 | .002 | .012 | .991 | .267 | 3.745 |
| Spectacular nature of the natural built surroundings | -.211 | .300 | -.154 | -.704 | .485 | .216 | 4.627 |
| Pleasant and relaxing nature the surroundings and atmosphere | .003 | .383 | .003 | .009 | .993 | .111 | 8.990 |
| Quality of food on the site | -.171 | .249 | -.157 | -.684 | .497 | .196 | 5.092 |
| Diversity of food and drinks | .173 | .216 | .173 | .802 | .427 | .222 | 4.513 |
| Access to souvenir store | .229 | .373 | .193 | .614 | .542 | .104 | 9.571 |
| Variety of choice in the souvenir store | .012 | .341 | .011 | .036 | .971 | .112 | 8.935 |
| Availability of something for everybody | .049 | .246 | .042 | .198 | .844 | .224 | 4.459 |
| Opportunity to bond with family and friends | .314 | .277 | .246 | 1.137 | .262 | .220 | 4.543 |
| Efficiency in the way ticket is sold/delivery | -.032 | .298 | -.028 | -.108 | .914 | .155 | 6.459 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Opportunity to learn | .028 | .156 | .032 | .179 | .859 | .329 | 3.038 |
| The use of technology | -.162 | .310 | -.128 | -.523 | .603 | .171 | 5.842 |
| Information on opening hours | -.097 | .290 | -.081 | -.336 | .739 | .175 | 5.722 |
| Consideration for health and safety | .363 | .339 | .243 | 1.070 | .290 | .199 | 5.017 |
| Entertainment | .403 | .216 | .396 | 1.865 | .069 | .228 | 4.377 |
| Management of waiting lines and queues are well managed | .176 | .178 | .191 | .988 | .328 | .276 | 3.627 |
| Opportunities to get involved and interactivity | -.017 | .231 | -.017 | -.073 | .942 | .187 | 5.355 |
| Opportunity for recreation | .198 | .273 | .182 | .726 | .472 | .164 | 6.114 |
| Range of activities | -.461 | .341 | -.400 | -1.354 | .182 | .118 | 8.475 |
| Duration of activities | .461 | .248 | .440 | 1.854 | .070 | .183 | 5.476 |

Regression analysis result (dependent variable – Val 7)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .484 | .234 | .206 | 1.878 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .235 | .084 | .246 | 2.796 | .006 | .605 | 1.653 |
| Factor 2: Staff attributes | .071 | .072 | .082 | .982 | .328 | .668 | 1.497 |
| Factor 3: Operations and environment | .226 | .081 | .245 | 2.795 | .006 | .608 | 1.644 |
| Factor 4: Retail | .067 | .074 | .075 | .904 | .367 | .676 | 1.480 |
| Factor 5: Access | -.054 | .067 | -.063 | -.808 | .420 | .778 | 1.285 |
| Factor 6: Ease of use | -.023 | .071 | -.025 | -.322 | .748 | .797 | 1.255 |

Regression analysis result (dependent variable – Val 7)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .825 | .681 | .423 | 1.833 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .264 | .203 | .217 | 1.301 | .200 | .243 | 4.108 |
| Parking facilities | -.050 | .175 | -.046 | -.288 | .774 | .264 | 3.789 |
| Information provided at the front desk about the attraction | -.393 | .181 | -.373 | -2.168 | .035 | .230 | 4.350 |
| Transport services to the site | .224 | .134 | .262 | 1.672 | .101 | .277 | 3.607 |
| Access for physically challenged to most part of the site | .005 | .148 | .005 | .031 | .976 | .226 | 4.427 |
| Smoking area | .010 | .122 | .012 | .079 | .937 | .301 | 3.323 |
| Effectiveness of signage and direction within the site | .095 | .173 | .096 | .547 | .587 | .219 | 4.568 |
| Availability of toilets | .139 | .146 | .164 | .953 | .346 | .228 | 4.378 |
| Effectiveness of written leaflets in providing enough information about the site | -.262 | .153 | -.290 | -1.716 | .093 | .237 | 4.211 |
| Facilities at the children's play area | -.156 | .150 | -.175 | -1.044 | .302 | .243 | 4.122 |
| Appearance of reception staff | -.174 | .203 | -.164 | -.855 | .397 | .184 | 5.440 |
| Promptness of services to visitors | .458 | .175 | .473 | 2.620 | .012 | .209 | 4.790 |
| Staffs ability to provide accurate and correct information | -.500 | .246 | -.497 | -2.035 | .047 | .114 | 8.779 |
| Treatment of visitors in a warm and friendly way by staff members | -.379 | .255 | -.403 | -1.486 | .144 | .092 | 10.846 |
| Staffs knowledge of products | .825 | .273 | .827 | 3.023 | .004 | .091 | 11.034 |
| General cleanliness | .091 | .190 | .080 | .480 | .633 | .245 | 4.074 |
| Visual attractiveness and appeal | -.004 | .204 | -.003 | -.020 | .984 | .305 | 3.282 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Cleanliness of restrooms | -.193 | .149 | -.215 | -1.298 | .201 | .248 | 4.029 |
| Ease of getting around within the site | .067 | .138 | .071 | .488 | .628 | .317 | 3.159 |
| Spectacular nature of the natural built surroundings | -.048 | .231 | -.040 | -.206 | .837 | .183 | 5.465 |
| Pleasant and relaxing nature the surroundings and atmosphere | .170 | .299 | .141 | .568 | .573 | .110 | 9.106 |
| Quality of food on the site | -.088 | .168 | -.090 | -.521 | .605 | .225 | 4.437 |
| Diversity of food and drinks | .257 | .150 | .270 | 1.711 | .094 | .272 | 3.676 |
| Access to souvenir store | -.403 | .238 | -.376 | -1.694 | .097 | .138 | 7.242 |
| Variety of choice in the souvenir store | .276 | .233 | .274 | 1.181 | .243 | .126 | 7.936 |
| Availability of something for everybody | .051 | .182 | .048 | .283 | .779 | .237 | 4.217 |
| Opportunity to bond with family and friends | .006 | .206 | .005 | .027 | .978 | .208 | 4.796 |
| Efficiency in the way ticket is sold/delivery | .126 | .209 | .112 | .603 | .549 | .197 | 5.076 |
| Opportunity to learn | -.008 | .113 | -.010 | -.073 | .942 | .355 | 2.821 |
| The use of technology | -.125 | .225 | -.111 | -.557 | .580 | .171 | 5.831 |
| Information on opening hours | -.004 | .203 | -.004 | -.019 | .985 | .181 | 5.524 |
| Consideration for health and safety | .248 | .244 | .191 | 1.017 | .314 | .193 | 5.175 |
| Entertainment | .159 | .148 | .163 | 1.073 | .289 | .293 | 3.410 |
| Management of waiting lines and queues are well managed | -.228 | .123 | -.275 | -1.852 | .070 | .307 | 3.253 |
| Opportunities to get involved and interactivity | -.053 | .167 | -.056 | -.314 | .755 | .211 | 4.729 |
| Opportunity for recreation | .265 | .200 | .251 | 1.326 | .191 | .189 | 5.292 |
| Range of activities | .087 | .237 | .081 | .365 | .717 | .137 | 7.293 |
| Duration of activities | .136 | .176 | .135 | .774 | .443 | .225 | 4.452 |

Regression analysis result (dependent variable – Val 8)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .580 | .337 | .313 | 2.062 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Factor 1: Activities | .324 | .068 | .389 | 4.731 | .000 | .595 | 1.681 |
| Factor 2: Staff attributes | .217 | .062 | .272 | 3.517 | .001 | .672 | 1.487 |
| Factor 3: Operations and environment | .057 | .068 | .066 | .829 | .408 | .634 | 1.577 |
| Factor 4: Retail | -.026 | .063 | -.032 | -.414 | .679 | .668 | 1.497 |
| Factor 5: Access | -.009 | .057 | -.011 | -.155 | .877 | .768 | 1.302 |
| Factor 6: Ease of use | -8.750E-5 | .061 | .000 | -.001 | .999 | .770 | 1.299 |

Regression analysis result (dependent variable – Val 8)

| R | $R^2$ | Adjusted $R^2$ | Durbin-Watson |
|---|---|---|---|
| .824 | .679 | .426 | 1.558 |

| Model | Unstandardized coefficient | | standardized coefficient | t | sig | Collinearity statistics | |
|---|---|---|---|---|---|---|---|
| | B | SE | β | | | Tolerance | VIF |
| Working condition of physical facilities and equipment | .183 | .208 | .164 | .883 | .381 | .195 | 5.132 |
| Parking facilities | -.079 | .178 | -.077 | -.443 | .660 | .223 | 4.483 |
| Information provided at the front desk about the attraction | -.242 | .185 | -.224 | -1.308 | .197 | .227 | 4.407 |
| Transport services to the site | -.087 | .135 | -.102 | -.639 | .526 | .261 | 3.836 |
| Access for physically challenged to most part of the site | .204 | .145 | .232 | 1.403 | .167 | .245 | 4.086 |
| Smoking area | -.011 | .120 | -.013 | -.088 | .930 | .304 | 3.293 |
| Effectiveness of signage and direction within the site | .036 | .178 | .036 | .202 | .841 | .215 | 4.655 |
| Availability of toilets | .189 | .149 | .221 | 1.265 | .212 | .218 | 4.587 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Effectiveness of written leaflets in providing enough information about the site | -.084 | .150 | -.095 | -.557 | .580 | .227 | 4.398 |
| Facilities at the children's play area | -.333 | .153 | -.382 | -2.168 | .035 | .215 | 4.656 |
| Appearance of reception staff | -.557 | .208 | -.515 | -2.675 | .010 | .180 | 5.560 |
| Promptness of services to visitors | .400 | .179 | .402 | 2.228 | .031 | .205 | 4.878 |
| Staffs ability to provide accurate and correct information | -.154 | .252 | -.150 | -.613 | .543 | .112 | 8.960 |
| Treatment of visitors in a warm and friendly way by staff members | .128 | .260 | .132 | .494 | .623 | .094 | 10.669 |
| Staffs knowledge of products | .274 | .280 | .265 | .978 | .333 | .091 | 11.019 |
| General cleanliness | -.013 | .190 | -.011 | -.067 | .947 | .251 | 3.977 |
| Visual attractiveness and appeal | -.021 | .209 | -.018 | -.101 | .920 | .222 | 4.498 |
| Cleanliness of restrooms | .081 | .151 | .090 | .539 | .593 | .242 | 4.135 |
| Ease of getting around within the site | .222 | .141 | .243 | 1.571 | .123 | .278 | 3.592 |
| Spectacular nature of the natural built surroundings | -.121 | .215 | -.098 | -.562 | .577 | .220 | 4.535 |
| Pleasant and relaxing nature the surroundings and atmosphere | .103 | .274 | .094 | .377 | .708 | .107 | 9.315 |
| Quality of food on the site | -.011 | .172 | -.011 | -.064 | .949 | .211 | 4.735 |
| Diversity of food and drinks | .065 | .154 | .071 | .426 | .672 | .240 | 4.175 |
| Access to souvenir store | -.168 | .243 | -.154 | -.693 | .492 | .135 | 7.391 |
| Variety of choice in the souvenir store | .202 | .239 | .196 | .843 | .403 | .123 | 8.108 |
| Availability of something for everybody | .047 | .182 | .044 | .255 | .800 | .226 | 4.431 |
| Opportunity to bond with family and friends | -.100 | .206 | -.084 | -.483 | .631 | .218 | 4.585 |
| Efficiency in the way ticket is | -.036 | .213 | -.034 | -.168 | .867 | .166 | 6.024 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| sold/delivery | | | | | | | |
| Opportunity to learn | .108 | .116 | .133 | .930 | .357 | .326 | 3.072 |
| The use of technology | -.080 | .231 | -.070 | -.346 | .731 | .165 | 6.065 |
| Information on opening hours | -.075 | .209 | -.069 | -.359 | .721 | .181 | 5.533 |
| Consideration for health and safety | .305 | .247 | .228 | 1.232 | .224 | .196 | 5.111 |
| Entertainment | .190 | .150 | .205 | 1.264 | .212 | .255 | 3.926 |
| Management of waiting lines and queues are well managed | -.173 | .126 | -.205 | -1.375 | .176 | .300 | 3.331 |
| Opportunities to get involved and interactivity | .080 | .172 | .088 | .466 | .643 | .186 | 5.367 |
| Opportunity for recreation | .260 | .204 | .259 | 1.276 | .208 | .162 | 6.182 |
| Range of activities | -.121 | .243 | -.114 | -.497 | .622 | .126 | 7.932 |
| Duration of activities | .084 | .177 | .086 | .472 | .639 | .200 | 5.004 |

Regression analysis result (dependent variable – Overall Behavioural Intentions)

| R | R Square | Adjusted R Square | Durbin-Watson |
|---|---|---|---|
| .774[a] | .599 | .599 | 2.116 |

| | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|
| Model | B | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| SAT5Overall I was satisfied with the attractions offering | .723 | .028 | .774 | 25.778 | .000 | 1.000 | 1.000 |